OZONE AND PARTICULATE MATTER NAAQS AND REGIONAL HAZE PROGRAM -ISSUES OF CONCERN TO STATES AND LOCALITIES RESPONSES TO QUESTIONS 1 - 101

OZONE

Transitional Nonattainment Areas

- 1. What, exactly, will be required of transitional areas?
- On what years of air quality data will transitional classifications be based?

Response: The Presidential Directive of July 16, 1997, provides information on the transitional classifications for areas that are designated nonattainment for the 8-hour ozone standard. The transitional classification would be available for areas that meet certain criteria, including having air quality data meeting the 1-hour ozone standard by 2000. EPA will be identifying those areas--and simultaneously revoking the 1-hour standard for those areas--starting in the Fall of 1997. Each year, EPA will continue to identify remaining areas that have air quality data meeting the 1-hour standard and then revoking the standard for them. EPA anticipates that 1997-1999 data will be used to determine in year 2000 the nonattainment areas for the 8-hour standard. EPA will classify areas at that same time.

• What process must an area undergo and on what schedule to apply and qualify for the transitional classification?

Response: The Presidential Directive of July 16, 1997, establishes the general outline of the transitional classification. Basically, the transitional classification would be available for any area attaining the 1-hour standard but not attaining the 8-hour standard as of the time that EPA promulgates designations for the 8-hour standard as follows:

(1) For those States subject to the NOx regional SIP call, the area submits necessary rules for NOx emission reductions by the deadlines specified in that SIP call; AND

Either --

Relies on previously performed regional ozone modeling of the emission reductions from the NOx regional SIP call to show they will attain the 8-hour standard; OR

► Takes early action to submit a State Implementation Plan (SIP) by 2000 providing for attainment.

OR

(2) For States not subject to the NOx regional SIP call, areas are eligible to be classified as transitional if (a)they submit plans by 2000 containing control measures that will result in attainment of the 8-hour standard, and (b) provide for the implementation of these measures on the same time schedule as the schedule for regional NOx reductions specified in the NOx SIP call.

The 1-hour standard will be revoked for areas that have air quality data meeting the 1-hour standard.

• What modeling will be required?

Response: Some preliminary clarifications of the Presidential Directive are anticipated by the end of 1997, and further policy and technical guidance (e.g., monitoring, emission inventory, modeling and attainment demonstrations) is scheduled to be issued in mid-1998. EPA anticipates that areas that are projected, by previously performed regional ozone modeling, to come into attainment of the 8-hour standard as a result of implementation of the NOx regional strategy will be able to rely for their attainment demonstration on that pre-existing modeling.

• What must an existing ozone nonattainment area do and by when to demonstrate attainment of the 1-hour standard by 2000 so that it is eligible for the transitional classification?

Response: The area must have air quality monitoring data that EPA determines meets the 1-hour standard by the time EPA promulgates designations for the 8-hour standard.

The response to the question under the first bullet above describes the process and years of data expected to be used for revocation of the 1-hour standard.

• What requirements will comprise the "streamlined" attainment demonstration for transitional areas?

Response: As noted above, EPA anticipates that areas that are projected by previously performed regional ozone modeling to come into attainment of the 8-hour standard as a result of the regional NOx strategy will be able to rely for their attainment demonstration on that pre-existing modeling. For areas that will need to adopt local measures beyond the regional NOx strategy in order to attain, the State will need to perform additional modeling of those local measures to demonstrate that they will result in attainment. As indicated in the Presidential Directive, EPA will work with affected areas to streamline this demonstration. As appropriate, these areas can rely on the boundary conditions from the modeling for the regional NOx strategy in performing the additional local modeling.

• What will be the monitoring requirements for transitional areas?

Response: The ambient air quality monitoring requirements are anticipated to be the same for transitional ozone nonattainment areas as for other (non-transitional) ozone nonattainment areas.

• What will be the baseline emissions inventory for transitional areas?

Response: EPA is still developing guidance on the baseline emission inventory for SIP's for areas classified as transitional. This guidance is expected to apply primarily to areas that are not able to rely on previously performed regional ozone modeling and must therefore develop a demonstration of attainment for the 8-hour ozone standard. EPA is considering recommending 1996 as the base year for the inventory. Further policy and technical guidance on emission inventories is scheduled to be issued in mid-1998. Additionally, EPA is compiling a comprehensive, nationwide emission inventory for 1996 in conjunction with the periodic emission inventory requirements. States can use this inventory to fill gaps for inventories required to support the transitional areas, especially for certain area source categories that the State has not routinely inventoried. The timing and scope of this inventory is consistent with the inventory needs for transitional areas. If states provide updates to the point source portion and other major portions of EPA's nationwide inventory, and ensure adequate quality of the data, then this inventory could be used as the baseline emission inventory for the transitional areas.

2. What are the incentives for an area to seek classification as transitional?

Response: Incentives concern new source review (see response to question #3), conformity requirements, and attainment demonstrations. The Presidential Directive notes that for areas classified as transitional, "[t]he EPA will revise its rules for new source review (NSR) and conformity so that States will be able to comply with only minor revisions to their existing programs in areas classified as transitional." Such "existing programs" include PSD programs in current attainment areas and conformity programs in maintenance areas. The NSR requirements for transitional areas are described below in response to question 3. Also, areas with previously performed regional ozone modeling that predicts the area will attain the 8-hour ozone standard by 2007 by application of the proposed NOX regional strategy will be able to avoid additional modeling to demonstrate attainment.

3. What will be the NSR requirements for transitional areas? How and when will EPA address/resolve equity issues that result from a NSR process that is less stringent in transitional nonattainment areas than in 1) other nonattainment areas or 2) areas, including those in attainment, in the Ozone Transport Region?

Response: EPA has developed a concept paper to set forth the basic components of its proposed NSR program for transitional areas. As described in this paper (a copy of the paper is attached), the requirements of this program will be very similar to existing major source preconstruction

review requirements under State prevention of significant deterioration (PSD) programs. In fact, in keeping with the President's Directive of July 16, 1997, EPA intends that only minor changes will be necessary to States' current permitting programs to accommodate the new program for transitional areas. New or modified major sources of ozone precursors in transitional areas would be subject to a major source threshold of 100 tons per year. Although the NSR program for transitional areas will require that major new source growth be offset, in contrast to the current process where sources obtain offsets, sources will be able to rely on "pools" of emission reductions generated by States through their regional or local control strategies. Consequently, the burden on individual sources for finding offsets will be eliminated.

EPA also has determined in general that the analysis for best available control technology under the PSD program should take into consideration the regional nature of some pollutants, such as ozone formation. Thus, when a particular pollutant is known to have more widespread environmental impacts it will ordinarily make it more difficult to justify the application of a less stringent control technology. This added concern for "regional" pollutants is expected to usually result in technology decisions which will more closely reflect the part D nonattainment NSR requirement for the lowest achievable emission rate. This change in Agency policy will affect the BACT selection process in general, and will also be applied as part of the transitional NSR program requirements currently under development.

Finally, EPA is giving serious consideration to extending some of the features of the new transitional NSR program to the part D nonattainment NSR program in general and to the NSR requirements for major sources in the Ozone Transport Region. For example, EPA believes that these programs should be able to rely upon the "pool of offsets" concept to address the part D offset requirements. EPA intends to propose any such changes to existing NSR program commensurate with the proposed rulemaking for a new transitional nonattainment NSR program.

4. What will be the transportation conformity requirements for transitional areas? How and when will conformity-related equity issues between transitional and other areas be resolved?

Answer: EPA will establish the transportation conformity requirements for transitional areas through rulemaking by December 1998. EPA is working with a conformity subgroup of the Ozone, PM and Regional Haze Implementation Programs Subcommittee of the Clean Air Act Advisory Committee to get input during the development of the proposal. The conformity subgroup includes state air agencies (including STAPPA), state departments of transportation, metropolitan planning organizations, environmentalists, and highway interest groups. EPA has also advertised its willingness to receive comments from conformity stakeholders at large.

EPA is in the process of a three-part strategy for examining the conformity requirements for areas that will not be classified as transitional. On August 15, 1997, EPA published amendments to the conformity rule for existing nonattainment and maintenance areas. EPA and the U.S. Department of Transportation (DOT) are working with Harvard University to conduct an

assessment of the conformity process after these amendments take effect, and EPA and DOT will be considering whether there are additional opportunities for conformity flexibility. In addition, EPA will be finalizing legal authority for the conformity pilot program this year. The conformity pilot program allows up to six areas to experiment with alternative conformity procedures.

5. Will some transitional areas have to implement additional local controls to alleviate the impact of their emissions on downwind areas?

Response: The proposed regional NOx reductions alone should be enough to allow most of the new nonattainment counties in States covered by the ozone transport rulemaking to be able to comply with the new 8-hour standard without additional local controls. In 2007, EPA will review the results of the regional NOx reductions to determine if additional reductions are necessary in those States covered by the SIP call to address ozone transport.

States in the OTAG region that are not required to comply with the requirements set forth in EPA's proposed ozone transport rulemaking would also benefit from the NOx strategy EPA is proposing. There may be situations in these States where additional local controls for VOC in an upwind area may be needed to alleviate nearby downwind problems, such as interstate urban areas

6. What happens to a transitional area if the regional strategy and/or local controls do not result in attainment of the 8-hour standard by 2007? What will the area have to do and when?

Response: EPA has not yet developed guidance on what the attainment date should be for areas classified as transitional. The 2007 date currently is the date for an assessment of the effectiveness of the ozone transport rulemaking. Areas classified as transitional that are required to adopt additional local controls beyond the regional NOX strategy and areas classified as transitional that are not implementing the regional NOX strategy must implement control measures in the same time frame as the regional NOX strategy measures. The Clean Air Act allows attainment dates as late as 10 years after designation of nonattainment. In addition, two one-year extensions are available for areas that do not attain by their attainment date if the areas meet certain criteria.

7. What will be the boundaries of a transitional area?

Response: The boundaries for any nonattainment area under the Act are established through a process which starts with a recommendation by the Governor on the appropriate boundaries and review and approval by EPA. The boundaries of a transitional area--like any nonattainment area-will be established when EPA responds to the Governor's recommendation and designates the area as nonattainment. An area that relies on previously performed regional ozone modeling of the regional NOx strategy that demonstrates attainment of the standard for that area will not have to adopt any additional measures, so the issue of a boundary may not be relevant at the time the

State is preparing its submittal for transitional classification. On the other hand, areas that need additional measures beyond the regional NOx strategy to demonstrate attainment and areas that are not implementing the regional NOx strategy or are outside the region affected by the NOx strategy will have to define the boundaries of the area to which control measures will apply prior to submission of their attainment demonstration for the transitional classification. EPA will work closely with States as they prepare their attainment demonstrations and control strategies to ensure that the boundary of the nonattainment area that is designated will be consistent with the boundary of the geographic area covered by the local controls needed for the attainment demonstration (this does not imply, however, that the control region boundary would have to be identical to the nonattainment area boundary). See also the response to question 19 on the boundaries of nonattainment areas (in general) for the 8-hour ozone standard.

8. How long is the transitional classification available? (e.g., If an area is initially found to attain the 8-hour standard but, at a later date, violates the standard and is redesignated to nonattainment, is the area eligible for the transitional classification?)

Response: The Presidential Directive addresses the transitional classification in the context of initial designations. The transitional classification is provided as an incentive for early action to attain the revised standard. EPA intends to consider whether the transitional classification could be made available after initial designations. In addition, EPA intends to pursue developing other incentives for early action to apply beyond the date for qualifying for the transitional classification, such as for areas that are redesignated nonattainment after initially being designated as attainment. The EPA welcomes suggestions from State and local agencies on what incentives might be appropriate and how they could be structured.

9. EPA has indicated that a "vast majority" of areas that currently meet the 1-hour standard, but that will not meet the 8-hour standard, may not require local planning to develop control measures for the 8-hour standard since regional strategies will address the nonattainment problem. What will be the basis for determining where and to what extent regional reductions are needed?

Response: The final ozone transport rulemaking will set forth the regional NOX emission reductions needed.

10. Will the regional strategy for ozone envisioned by EPA address all of the control sectors recommended by OTAG or only utilities?

Response: In determining the budgets for each State, EPA considered "reasonable, cost-effective" controls to each State. EPA set the budgets based on utility and non-utility controls. However, States will be able to decide the best mix of controls to meet their overall budget. Utility and large boiler controls under a cap-and-trade program are a suggestion for cost-effective strategies that States may wish to consider to achieve the reductions.

11. Will controls be applied in "coarse grid" states?

Response: In the proposed ozone transport rulemaking EPA did not establish statewide NOX emission budgets for the "coarse grid" States.

12. If OTAG controls are not required in "coarse grid" states, will areas within these states be eligible for the transitional classification? If they are eligible, can such areas use OTAG modeling plus any other modeling developed by the state to support or supplement the OTAG modeling?

Response: OTAG areas not covered by the ozone transport rulemaking are still eligible for transitional classification if they meet the other requirements outlined in the Presidential Directive. Yes, the areas can use previously performed regional ozone modeling. By mid-1998, EPA plans to develop guidance on modeling requirements for areas seeking the transitional classification.

13. Will border areas that demonstrate that they would attain the 1-hour standard but for international transport be eligible for classification as transitional? If so, what showing must be made?

Response: The Presidential Directive does not provide that areas not attaining the 1-hour standard will be eligible for the transitional classification. However, EPA will examine whether special circumstances would merit that areas subject to international transport be eligible. If EPA determines that such areas should be eligible for the transitional classification, guidance scheduled for release by mid-1998 will address the showing that would have to be made; EPA currently expects that its previous interpretation of the necessary showing under section 179B of the Clean Air Act will not significantly change. The EPA believes, however, that the 179B analyses should be based on modeling of emissions from both sides of the international border if the data are available.

These areas would then be subject only to the requirements for transitional nonattainment areas for the 8-hour standard. It should be noted, however, that even if such areas were eligible for the transitional classification for purposes of the 8-hour standard, they would still be nonattainment for the 1-hour standard. Therefore, they would remain subject to the planning requirements of subpart 2, including NSR related to the 1-hour standard. Hence, there may be little incentive to obtain the transitional classification.

14. How can western border areas apply a regional strategy?

Response: Western States that border the OTAG domain are not covered by the OTAG modeling and therefore cannot rely on that modeling. They may, of course, elect to develop their own regional strategy. The State would have to provide a technical analysis, similar to the significant contribution analysis in the proposed NOx regional strategy rulemaking, showing that the strategy would benefit the affected areas.

15. What role will EPA play in establishing and administering a cap-and-trade program for regional emission reductions?

Response: The EPA is planning to develop and administer an interstate cap-and-trade program that could be used to implement a statewide NOX emission budget. States electing to reduce emissions from the types of sources covered by this program in order to achieve and maintain the statewide emissions budget could voluntarily participate in this program. The EPA is planning to develop a cap-and-trade program for large combustion sources because it provides a proven and cost-effective method for achieving and maintaining a statewide NOX emission budget while providing maximum compliance flexibility to affected sources. Overall, implementation of a regional cap-and-trade program would likely lower the costs of attaining reductions through more efficient allocation of emission reduction responsibilities, minimize the regulatory burden for pollution sources, and serve to stimulate technology innovation. In developing the cap-and-trade program, EPA will build upon the work produced by OTAG's Trading/ Incentives Work Group. Based upon OTAG's products and upon experience from other relevant efforts, EPA plans on proposing a model NOX cap-and-trade rule in a supplemental notice of proposed rulemaking in the Spring of 1998. This model rule will outline EPA and State responsibilities for implementing the program. Generally, EPA expects that it would be responsible for managing the emissions data and market functions of the program and that States would have the primary responsibility for enforcing the requirements of the program.

In establishing the specific program applicability, EPA expects to propose inclusion of those large combustion sources that are most cost-effective for controlling emissions, while also capturing the majority of NO_x emissions from the stationary source sector. Market features of the program will address such issues as the basic design of the trading system, the process for setting emission limitations (e.g., allocation of allowances, generation performance standard, etc.), and provisions for emissions trading and banking. The EPA will work to develop a cap-and-trade system with market features that are easily understood to facilitate maximum participation, minimum transaction costs, and maximum cost savings. The EPA will also take comment on ways to include a broader set of industrial and mobile sources within the cap-and-trade system.

Other Nonattainment Areas Under the 8-Hour Standard

- 16. What are the attainment demonstration requirements for ozone nonattainment areas under the 8-hour standard? What are the modeling requirements? AND
- 17. For areas that still violate the 1-hour standard, what will be the attainment demonstration requirements for the 8-hour standard and what will be the schedule for meeting these requirements?

Response: Policy and technical guidance on monitoring, emission inventories, modeling and

attainment demonstrations for the 8-hour standard is scheduled to be issued by the end of 1998. The same attainment demonstration requirements for the 8-hour standard will apply to all nonattainment areas for that standard. The attainment demonstration would be required when the SIP is submitted which must be no later than 3 years from when the area is designated nonattainment for the 8-hour standard. As noted in the Presidential Directive, areas that are not eligible for the transitional classification that are required to submit an implementation plan to achieve the 8-hour standard can rely in large part on measures needed to attain the 1-hour standard. For virtually all of these areas, no additional local control measures beyond those needed to meet the requirements of subpart 2 and needed in response to the regional transport strategy would be required to be implemented prior to their applicable attainment date for the 1-hour standard.

18. How will new violations of the 8-hour standard be addressed after initial designations in 2000?

Response: The initial designations would list both nonattainment and attainment/unclassifiable areas. EPA would address violations that occur in the attainment/unclassifiable areas through the redesignation process under section 107 of the Clean Air Act.

19. What will be the boundaries of an ozone nonattainment area under the 8-hour standard?

Response: The boundaries for any nonattainment area under the Act are established through a process which starts with a recommendation by the Governor on the appropriate boundary and review and approval by EPA. In the past, for the 1-hour ozone standard the MSA or CMSA was the presumptive nonattainment area boundary for serious, severe and extreme areas in order to address sources that were contributing to violations in the nonattainment area. This requirement was added to the Clean Air Act in 1990 to subpart 2 of the part D nonattainment area requirements. However, implementation of the 8-hour ozone standard is governed by subpart 1 of part D, which does not specify how boundaries should be drawn. EPA will need to develop guidance on how nonattainment area boundaries should be determined for the 8-hour NAAQS. The EPA will issue this guidance by the end of 1998. However, due to the regional nature of ozone and related timing issues, EPA does not plan on setting actual boundaries through formal designations until July 2000.

The EPA will issue initial guidance by early 1998 to aid States in submitting recommended designations in July 1998, pursuant to the Act. Throughout 1998, EPA and States will be able to analyze the effects of regional and local transport on potential nonattainment areas within their borders and EPA will be moving to finalize its regional NOx rule. During this time States can assess the effects of transport on individual areas and determine which locations "contribute" to "nearby" monitored violations, as those terms are used in the definition of "nonattainment area" in the Act. For example, if an area that is monitoring a violation is expected to attain the standard through implementation of regional NOx measures, it may not be reasonable or necessary to

include all of the surrounding suburban counties in the nonattainment area if those counties' contribution to nonattainment can be shown to be insignificant in light of the controls to be installed in upwind areas.

The EPA expects that the need to await the outcome of the regional NOx rulemaking and other analyses of regional and local transport will result in the Agency's determining in 1999 that it has insufficient information to decide how area boundaries should be drawn for the revised standard. EPA anticipates that upon completion of its regional NOx rulemaking and other regional and local transport analyses, Governors will wish to submit during 1999 revised designation recommendations to account for the results of the transport analyses. After Governors submit revised recommendations in 1999, EPA could be expected to need until 2000 to determine finally how the area boundaries should be drawn, to notify the Governors of any expected modifications to their recommendations, and to promulgate the designations.

States that are not substantially affected by interstate transport of criteria pollutants or their precursors may have areas that are affected by transport of these pollutants from other areas within the same State. These States will also need sufficient time to assess the effects of transport on individual areas and determine which locations contribute to nearby monitored violations before determining the boundaries of the nonattainment areas.

20. Will there be any mandatory control measures for new nonattainment areas under the 8-hour standard?

Response: Although subpart 2 of the Act is applicable to the 1-hour ozone NAAQS, subpart 1 governs implementation of the 8-hour ozone NAAQS. EPA has authority under section 172 of the Act to establish a schedule for submittal of plans to comply with the requirements of that section. Section 172 addresses nonattainment planning provisions, the most significant of which are: the attainment demonstration, emission inventories, the implementation of all reasonably available control measures, including RACT; reasonable further progress; conformity; enforceable emission limits and other measures; and new source review. EPA will provide guidance by the end of 1998 on how these requirements should be implemented by areas that are not attaining the 8-hour NAAQS.

21. Can areas that implement voluntary measures to maintain the 1-hour standard take credit for these measures towards attaining the 8-hour standard if the 1-hour standard is revoked?

Response: Yes, under certain circumstances. EPA issued a memorandum of October 23,1997 on how and when an area can take credit in an attainment demonstration for certain programs known as Voluntary Mobile Source Emission Reduction Programs (VMEPs). Under the policy, VMEPs may not be used to substitute for programs required to be implemented as part of a regional control program. Areas that need additional emission reductions beyond those required in the regional control program will need to implement some local programs. Voluntary measures may

be an option for areas to include in their implementation plan for achieving these local emission reductions. EPA has begun an outreach effort to introduce the concepts in the VMEP policy and will be working with State and local agencies as well as other stakeholders to work through specific implementation issues. This policy will apply the same to the 1-hour and 8- hour ozone standards.

EPA is still considering whether credit for voluntary measures may be appropriate for other limited circumstances where traditional controls are not feasible or where local and regional conservation measures (e.g., to reduce agriculturally generated precursors) are being applied; safeguards such as those included in the VMEP program policy with enforceable backstops would have to be applied. EPA will continue to study these potential applications on a case-by-case basis.

22. How will EPA address multistate nonattainment areas under the 8-hour standard?

Response: For designations under the 1-hour standard, EPA recognized multistate nonattainment areas, e.g., Kansas City, Kansas/Missouri, St. Louis, Missouri/Illinois. Most likely this same approach will be followed for designations under the 8-hour standard.

Revocation of the 1-hour Standard

- 39. What criteria will be used and what process followed to revoke the existing 1-hour ozone standard?
 - ! On what years of data will revocation occur?
 - ! On what schedule will revocation occur?
 - ! What kinds of areas will be eligible for revocation of the standards?
 - ! What will these areas need to do in order for the standard to be revoked?
 - ! Will areas have to meet all the requirements of 40 CFR part 58?

Response: The 1-hour standard will be revoked when EPA determines that an area is attaining the standard based on three years of air quality data. These areas will not need to do anything to have the standard revoked. The 1-hour standard will apply only to areas violating the 1-hour standard. For all other areas, including areas with no data, the 1-hour standard will be revoked. Based on the timing contained in the Presidential Directive, it is EPA's plan to publish its determinations revoking the 1-hour standard for areas in December 1997. This finding will generally be based on 1994-1996 air quality data. Future actions to revoke the 1-hour standard from attainment and nonattainment areas will occur on an annual basis. Additional information will be contained in the forthcoming notice revoking the 1-hour standard.

- 40. What requirements, if any, will be imposed in areas where the 1-hour standard is revoked?
 - What previously existing requirements will no longer apply as a result of revocation?

- ! Will maintenance plans be required in areas once the standard is revoked?
- ! Will maintenance plans continue to apply in areas where these plans were previously approved and are already in force?
- ! Once the standard is revoked in a maintenance area, will these areas be required to do anything during the period of time between revocation and designation under the new 8-hour standard?
- ! If there will be no maintenance plans for existing ozone nonattainment areas once the 1-hour standard is revoked in those areas, will conformity continue to apply in these areas during the period prior to designation under the 8-hour standard? If so, how?

Response: Once the 1-hour standard is revoked, areas will not be subject to new requirements for the purpose of meeting the 1-hour standard. Although the provisions of subpart 2 will no longer apply to an area where the 1-hour standard has been revoked, in no case does the revocation authorize States to suspend, delay or revoke any SIP measures adopted in response to provisions of subpart 2 unless the State demonstrates that such suspension, delay or revocation will not adversely affect the ability of the State to attain or maintain any NAAQS. For areas where the 1-hour standard is being revoked, maintenance plans for that standard will no longer be required. However, maintenance plans that have been approved by EPA remain effective in areas where the 1-hour standard is revoked. For areas that have approved maintenance plans where the 1-hour standard is revoked, any contingency measure that is tied to a non-air quality element, such as emission increases or VMT increases, must remain in effect and can only be removed from the SIP if a demonstration shows it will not adversely impact the ability of the area to attain or maintain any NAAQS. If a contingency measure is tied to the 1-hour standard or air quality measurements, then it can be removed from the SIP.

The EPA believes that transportation and general conformity requirements should continue to apply after revocation of the 1-hour standard in any area that is or was designated nonattainment after 1990 and that has an approved maintenance plan. EPA is considering what the conformity requirements should be for revocation areas that do not have a maintenance plan. When Congress passed the Clean Air Act Amendments in 1990 and the National Highway Designation Act of 1995, which clarified the applicability of conformity requirements, it presumed that post-1990 nonattainment areas which were subject to the conformity requirements would either continue to be designated nonattainment, or be redesignated to attainment, and thereby become maintenance areas. It did not address the possibility that there could be a period following the revocation of an existing standard, during which no designation would apply. Nonetheless, areas previously in nonattainment for the 1-hour ozone standard are at risk to violate the new 8-hour ozone standard and EPA believes that, had it addressed the issue, Congress would have intended conformity to continue for all the areas where it previously applied, notwithstanding the lack of designations, to prevent Federal actions from causing or contributing to violations. Therefore, EPA believes that continuing the conformity requirements in the areas described above, at least during the interim period of transition from implementation of the old standard to that of the new standards, meets the spirit of Congress' intent.

41. When EPA evaluates areas to determine where the 1-hour standard will cease to apply, will the agency also take action to designate as nonattainment current attainment or maintenance areas that have experienced violations of the 1-hour standard based on the applicable three years of data?

Response: Where air quality data show nonattainment, EPA may be redesignating areas from attainment to nonattainment for the 1-hour standard. The EPA will review the special and unique circumstances of each area in making any determination on redesignation of the area back to nonattainment. Where this occurs, States should follow implementation guidance on the applicable subpart requirements issued at the time of redesignation.

- 42. After the initial round of revocations (to comply with the Presidential Directive's commitment to issue a list within 90 days), what additional opportunities will there be to qualify for revocation of the 1-hour standard?
 - If an area is not now eligible for revocation of the 1-hour standard, but is in a future year and EPA does not take timely action to revoke the standard, such that a subsequent year's data results in violation of the 1-hour standard, will the area no longer be eligible for revocation of the 1-hour standard or will the standard be revoked based on the three years of clean data, regardless or EPA's lack of timeliness?

Response: EPA plans to publish an action revoking the 1-hour standard on an annual basis, following the initial round of revocations that will occur in November 1997. The EPA plans to base each set of revocations on the most recent three years of quality assured data. Consequently, EPA plans to issue the next set of revocations early in 1998 based on air quality data from 1995 to 1997.

35. If the 1-hour standard is revoked in an existing ozone maintenance area, what requirements no longer apply in the area?

AND

36. Will areas with previously approved maintenance plans for the 1-hour standard be required to continue implementation of these plans? If not, as of when? Will the SIP relaxation requirements of Section 110(l) or Section 193 apply?

Response to questions 35 and 36: Upon EPA's determination that an area has attained the 1-hour ozone standard and revocation of that standard, the provisions of subpart 2 will no longer apply to that area for purposes of attaining that standard. However, all SIP requirements must continue to be implemented because these SIP measures provide a transition to attainment planning for the new NAAQS and will avoid backsliding to degraded air quality. SIP elements, including maintenance plans, however, may be revised and submitted to EPA for approval provided the State can demonstrate that the revision does not interfere with meeting any requirements of the Act, including attainment of any NAAQS. The EPA is precluded from approving any revision

failing this test. EPA-approved maintenance plans remain effective where the 1-hour standard is revoked. Additional information will be contained in EPA's forthcoming guidance memorandum on implementing the 1-hour ozone standard. See answer to question #40.

37. What will happen to attainment areas that, based on 1994-1996 data, violated the 1-hour standard? How about those that have violated based on 1995-1997 data?

Response: For attainment areas that show violations of the 1-hour standard based on 1994-1996 or 1995-1997, the 1-hour standard will continue to apply until EPA determines that an area has air quality meeting the 1-hour standard. Attainment areas which are violating the standard are required to implement contingency measures to bring the area back into attainment. Areas designated nonattainment where the standard is not revoked continue to be subject to the requirements of subpart 2 of the Act. If an area was previously classified as nonattainment and redesignated to attainment prior to September 16, 1997, and violates the 1-hour standard based on 94-96 or 95-97 data, EPA has the discretion to subject the area to the requirements of subpart 1, e.g., reasonably available control measures, reasonable further progress, emission inventories, etc.

Continuing Nonattainment Areas Under the 1-hour Standard/Transport and Regional Strategies

23. What exactly is required of existing ozone nonattainment areas (where the standard is not revoked) and when?

Response: Subpart 2 of title I governs ozone nonattainment areas for the 1-hour NAAQS until EPA determines that an area has attained that standard. Thus, such nonattainment areas are subject to the provisions contained in subpart 2 such as classifications, the statutory attainment dates and bump-up for failures to attain, attainment demonstrations, reasonable further progress, and EPA's implementation regulations and guidance for the 1-hour standard. All of the dates under subpart 2 continue to apply to existing ozone nonattainment areas.

The immediate actions for some of these existing nonattainment areas are:

- 1) areas not attaining the 1-hour NAAQS by their attainment date will be subject to: (a) the reclassification requirements in section 181(b)(2) of the Act, which state that areas will be reclassified (bumped up) to the next higher classification or classification associated with the area's design value; and (b) all the requirements of the classification to which they are bumped as specified in section 182;
- 2) areas designated as serious and above must continue to achieve volatile organic compounds (VOC) or nitrogen oxides (NOX) reductions of 3 percent per year, averaged over a 3-year period

until the area has air quality meeting the 1-hour standard;

- 3) On or before April 1998, States in the OTAG region with serious and higher classified nonattainment areas should submit to EPA their attainment demonstrations for the 1-hour standard, modeling analysis, and supporting documentation. In addition, the submittal should contain the following five elements:
- (a) Evidence that all measures and regulations required for the nonattainment area by subpart 2 of title I of the Act to control ozone and its precursors have been adopted and implemented or are on an expeditious schedule to be adopted and implemented.
- (b) A list of measures and regulations and/or a strategy including technology forcing controls needed to meet ROP requirements and attain the 1-hour NAAQS.
- (c) For severe and higher classified nonattainment areas, a SIP commitment to submit a plan on or before the end of 2000 which contains (i) target calculations for post-1999 ROP milestones up to the attainment date (unless already submitted to satisfy EPA's previous findings of failure to submit) and (ii) adopted regulations needed to achieve the post-1999 ROP requirements up to the attainment date and to attain the 1-hour NAAQS. (Note that for many States, EPA has proposed in its regional NOX SIP call to require submittal of NOX reduction programs by the earlier date of September 1999 and that reductions from these programs can contribute to achieving ROP.)
- (d) A SIP commitment and schedule to implement the control programs and regulations in a timely manner to meet ROP and achieve attainment.
 - (e) Evidence of a public hearing on the State submittal.
- 24. For existing ozone nonattainment areas that have not yet submitted attainment demonstrations for the 1-hour standard, when are these demonstrations due and what must they include?

Response: (refer to #3 in the response to question 23, above).

25. Will there be any new requirements for areas that have already submitted an attainment demonstration for the 1-hour ozone standard?

Response: Generally, ozone nonattainment areas that have already submitted and EPA has approved an attainment demonstration should implement that demonstration. Several moderate areas submitted plans, including an attainment demonstration, for the 1-hour NAAQS but did not in fact attain the NAAQS by the November 15, 1996 attainment deadline in the Act. Where States submitted attainment demonstrations for areas that failed to attain the 1-hour NAAQS or where these areas are bumped up to serious areas, such attainment demonstrations are no longer

relevant because their actual air quality data reflect nonattainment. Thus, these areas become subject to bump up to the serious classification and the statutory requirements applicable to serious areas. Once such areas are bumped up, the obligation to demonstrate attainment by the former attainment date will be superseded by the requirement to demonstrate attainment by the serious area attainment deadline. In addition to the serious area requirements, all of the statutory requirements for the moderate classification and regulations submitted by States and approved by EPA, except for the requirement to demonstrate attainment by November 15, 1996 remain in effect.

26. Will areas be allowed to discontinue or substitute for already adopted controls?

Response: States are always free to revise their State implementation plans (SIPs) and submit the revision to EPA for approval in accordance with procedures in the Clean Air Act and EPA's implementation policy, provided the State can demonstrate that the revision will not interfere with attainment and maintenance of any standard, any progress requirement, or any other applicable requirement of the Act. Section 110(l) provides in part, "The Administrator shall not approve a revision of a plan if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in section 171), or any other applicable requirement of this Act."

Related to the substitution, EPA will soon issue final guidance that an area in nonattainment for the 1-hour NAAQS will be allowed to take credit for emissions reductions obtained from sources outside the designated nonattainment area for the post-1996 ROP requirement as long as the sources are no farther than 100 km (for VOC sources) or 200 km (for NOX sources) away from the nonattainment area. EPA allows the State to expand the allowable area for NOX substitutions up to the entire State for those States in the core part of the Ozone Transport Assessment Group (OTAG) domain, i.e., the fine grid area, if they so choose. All other States implementing a NOX substitution strategy for ROP are restricted to a distance of 200 km from the nonattainment area, unless a substitution for a greater distance is accompanied by adequate technical justification. There are some cases in the western portions of the United States where 100 km for VOC substitution or 200 km for NOX substitution from the nonattainment areas are not appropriate for ROP credit. In those cases, States must obtain approval from EPA to verify credit and applicability prior to implementing such a substitution.

The reductions obtained outside the nonattainment area are subject to the same use restrictions as if they were obtained inside the nonattainment area. For example, the same reduction should not be double counted for ROP credit and for new source growth offsets. Emissions from the source(s) outside the nonattainment area that are involved in the substitution must be included in the baseline ROP emissions and target ROP reduction calculation. Emissions from source(s) outside the nonattainment area that are not involved in the substitution would not have to be inventoried or included in the baseline ROP emissions and target ROP calculation. States will need to track and record emission reductions and certify to EPA the amount of

emission reductions achieved for ROP. This guidance also allows ROP credit from measures mandated by the Act and implemented by States outside of their nonattainment areas to reduce precursors of ozone. Creditable reductions achieved outside a nonattainment area will include those occurring from measures such as those EPA has proposed in its regional NOx SIP call signed by the Administrator on October 10, 1997 for States to reduce interstate pollution transport.

For areas having approved NOX waivers granted under section 182(f), NOX reductions achieved outside the nonattainment area with waivers may be substituted for VOC reductions within the nonattainment area if accompanied by adequate technical justification at the time of submittal. In general, substitutions in waiver areas may be allowed but only if EPA determines that the substitution would result in a reduction in ozone concentrations in the nonattainment area with waivers and are accompanied by an amended NOx waiver.

Credit for substitutions to complete or revise the 15 percent ROP requirement for VOC emission reductions in nonattainment areas through 1996 is not allowed. Although the start date for application of ROP substitution reductions from outside the nonattainment area is now applicable to post-1996 ROP requirements consistent with past Agency policy, States may bank excess earlier reduction credits (NOX or VOC) to apply to post-1996 and later requirements.

States may not substitute other controls for specifically mandated measures such as inspection/maintenance or reasonably achievable control technology that are required by the Act due to the area classification or location within the Ozone Transport Region. In these cases, the measures are prescribed, required controls for which the Act does not allow EPA discretion to remove.

Substitutions are restricted to intrastate areas unless two or more States involved reach mutual agreement. Similarly, application of credits from substitutions should be limited to only one nonattainment area unless two or more areas involved reach agreement on dividing the credit between them, such that the same emission reductions are not credited toward the progress requirements for more than one area. Interstate substitutions, like intrastate substitutions, must be enforceable by the States in which the affected sources are located.

27. What boundary conditions can areas assume for the attainment demonstration for the 1-hour standard, in that the final OTAG SIP call will not occur until September 1998?

Response: States should use conditions that reflect EPA's proposed regional SIP call for NOx reductions.

28. Will maintenance plans be required for areas once they meet the 1-hour standard?

Response: In accordance with the Presidential directive, maintenance plans for the 1-hour

standard will no longer be required. Areas will still have to keep implementing any measures they were currently implementing to achieve the standards such as conformity, inspection and maintenance programs or other controls. Additional information will be contained in EPA's guidance memorandum on implementing the 1-hour ozone standard.

29. When will EPA make the determination that the 1-hour standard no longer applies in an area and work specifically geared toward attainment of the 8-hour standard must begin -- when monitored air quality data show compliance or when all redesignation requirements have been met?

Response: The 1-hour ozone standard will no longer apply when EPA revokes the standard for an area. Revocation will be based on monitored air quality data. Areas will not be required to meet redesignation requirements. For areas that have attained the NAAQS based on air quality data, EPA will publish a list of areas where the 1-hour standard is being revoked in December 1997. In the future EPA will take action to revoke the 1-hour standard on an annual basis. Additional information will be contained in EPA's final guidance memorandum for implementing the 1-hour ozone standard and the notice revoking the 1-hour standard.

30. When are attainment demonstrations for the 8-hour standard due for these areas and what must these demonstrations include?

Response: Under the Act, attainment demonstrations are due by a date established by the Administrator that can be no later than three years from the designation of nonattainment areas. To obtain the transitional classification, areas will be required to submit attainment demonstrations prior to the designation and classification process in 2000; some areas will be able to rely on previously performed regional modeling of the regional NOx strategy. The specifics of what these demonstrations must include has not yet been determined. The EPA expects to issue guidance for transitional areas in mid-1998 and for other ozone areas by the end of 1998. This guidance will include deadlines for when attainment demonstrations will need to be submitted for non-transitional areas (no later than July 2003). Under the Act, EPA will also formally establish the SIP deadlines through rulemaking in the same time frame as designations.

31. EPA has indicated that an existing ozone nonattainment area is not required to implement measures to meet the 8-hour standard until the 1-hour standard is met. How is this consistent with the President's directive to carry out implementation of the new standards to "maximize common sense, flexibility and cost effectiveness?"

Response: The measures needed to meet the 1-hour standard will generally be a "glide path" toward attainment of the 8-hour standard. While additional local reductions may be needed to meet the 8-hour standard, for virtually all areas these can occur after the 1-hour attainment date. This is consistent with the Presidential directive to use common sense and provide flexibility since it allows States to move forward to meet the 1-hour standard prior to implementing additional

measures that may be required for the 8-hour standard. It assures continued progress toward cleaner air.

32. What will happen if an existing ozone nonattainment area continues to violate the 1-hour standard beyond 2010?

Response: Areas that do not attain the 1-hour ozone standard by their attainment date would continue to be bumped up to a higher classification until they reach the severe classification (areas cannot be bumped to extreme). Section 185 of the Clean Air Act then applies for severe and extreme areas that do not attain by their attainment date. That provision sets forth a system of emission fees (equal to \$5000 a ton a year for major stationary sources of VOC, with provision to adjust for inflation).

33. What should existing Moderate ozone nonattainment areas do regarding existing and future contingency provisions?

Response: Generally, contingency measures are required in nonattainment areas to provide for missed milestones and in maintenance areas to provide for continued attainment. Existing and future contingency provisions in nonattainment areas should be implemented as appropriate.

34. What, if any, impact does the NAAQS revision have on already-approved NO_x waivers?

Response: The 1990 CAAA added section 182(f) which imposed new NOx requirements. Specifically, the new subpart 2 requirements applied NSR and RACT to certain major stationary sources in the NE Ozone Transport Region and in certain nonattainment areas. Section 182(f) also provided that these new requirements would not apply under certain circumstances; i.e., where NOx reductions do not contribute to attainment. In response to various petitions filed by States, EPA granted NOx waivers under section 182(f) for several areas related to the 1-hour ozone standard. In addition, existing national regulations and/or policy also tie NOx waivers to aspects of conformity, motor vehicle inspection and maintenance, and Title V rules. The previously mentioned NOx requirements apply to attainment of the old 1-hour ozone standard and subpart 2 of the Title I of the CAA. EPA has not set forth any interpretation regarding NOx requirements (including the potential for NOx waivers) under the nonattainment planning requirements of subpart 1 for the new 8-hour ozone standard. However, EPA is investigating potential issues related to NOx waivers.

- 43. How will retention of the bump-up provisions of Subpart 2 for existing ozone nonattainment areas play out and what impact might it have?

 AND
- 44. How will bump-ups of Moderate ozone nonattainment areas under the 1-hour standard be handled?

When will Moderate area bump-ups occur?

On what criteria will such bump-ups be based?

What will be the SIP submission dates, attainment demonstration requirements and control requirements?

Will an affected area's boundaries be changed to include the entire CMSA?

Response to 43 and 44: Several bump-ups to a higher classification, reclassifications, were proposed in September by the EPA Regional Offices. For these proposals, the reclassification was based on measured air quality. SIPs to attain the 1-hour standard by the attainment date in the Act were proposed to be due one year from promulgation of the reclassification; no change was proposed for the boundaries of the areas. The areas will be subject to the attainment demonstration and control requirements associated with the higher classification.

45. Will moderate areas that have not attained the 1-hour standard by 1996 be bumped up if they are recipients of significant transport and regional measures are expected to result in attainment of both the 1-hour and 8-hour standards?

Response: These areas will not be treated any differently than they are currently. With the retention of subpart 2, areas failing to attain the 1-hour standard by their attainment date are subject to being bumped up to the next classification or the classification associated with their design value. Only those areas affected by <u>overwhelming</u> transport can temporarily suspend their attainment date without being bumped up if they can meet EPA's overwhelming transport policy (Reference September 1, 1994, policy on "Ozone Attainment Dates for Areas Affected by Overwhelming Transport").

Other Ozone issues

38. What requirements will apply for "Flexible Attainment Regions" under the 1-hour standard that will violate the 8-hour standard? How much credit will these areas get for voluntary reductions? How much modeling will be required?

Response: Flexible Attainment Region (FAR) Agreements were voluntary initiatives developed under the 1-hour ozone standard, and were applicable to areas that had been ozone nonattainment, but were redesignated to attainment before the 1990 Clean Air Act. The FAR approach encouraged partnership between a local community, State and EPA to proactively implement ozone control strategies to facilitate staying in attainment. Local initiative to implement early reductions programs to remain in attainment was a key principle of the Agreements. The Agreements also included a commitment to implement specific contingency

measures in the event of a violation; the contingency measure would be part of the State Implementation Plan (SIP), even though the FAR agreement itself would not be part of the SIP. These SIP measures would provide the opportunity to achieve reductions in ozone levels before a nonattainment designation would be made. The design of the FAR approach and its use of contingency measures was similar to the structure of maintenance plans.

The FAR agreements would continue under the 1 hour standard until clean data has been demonstrated and the 1-hour standard is revoked. When the 1-hour standard is revoked, the agreement could also continue; however, contingency measures under the 1-hour standard will become voluntary. This is consistent with EPA's interpretation of handling contingency measures in maintenance plans. We would encourage the areas under a FAR agreement to continue their proactive efforts to reduce ozone levels with the goal toward reaching attainment of the 8-hour standard by the year 2000. Due to the requirement for all areas to be designated under the 8-hour standard, EPA anticipates that 1997- 1999 data will be used in this decision.

Unless and until the area is designated nonattainment under the 8-hour standard, areas with FAR agreements (because they are currently designated attainment for the 1-hour standard) are not required to make SIP demonstrations or develop attainment plans. Therefore, no new analyses involving modeling or demonstration of voluntary credit is necessary. An area with a FAR that expects to be nonattainment under the 8-hour standard may want to consider developing an early plan for attaining the 8-hour standard and be considered for the special transitional nonattainment classification. (See response to question 1 which addresses the schedule for future guidance for transitional nonattainment areas).

46. What incentives are there for monitoring?

Response: Current existing incentives for the ambient monitoring of ozone include:

- ! the requirements for ambient monitoring (40 CFR 58), requiring the States to perform additional monitoring, especially where the networks are incomplete,
- ! the need to more accurately characterize the boundaries/extent of nonattainment areas to ensure that control strategies affect the appropriate sources and are implemented in a well-defined area,
- ! the requirements and the need to provide air pollution information to the public via a Pollutant Standards Index (PSI), etc.,
- ! the need for a more complete ambient data base of both ozone and precursors to provide information which can be used to develop focussed ozone control/management strategies.

During the FACA process, the Ad Hoc Group on Monitoring Incentives developed a list of monitoring incentives which could be implemented to provide incentives for additional ambient air monitoring. EPA will review the list prepared by the Ad Hoc Group and any

recommendations made by the FACA Subcommittee to determine whether to provide additional incentives.

47. What additional monitoring will be required under the 8-hour standard and how will it be funded?

Response: No new requirements will be promulgated. States will be encouraged to expand their networks to include more rural- and transport-oriented sites.

48. Will any of the monitoring siting criteria be changed?

Response: No.

PARTICULATE MATTER

PM₁₀ Issues

49. What will be the redesignation requirements and process for existing PM_{10} nonattainment areas that meet both the existing and new standards?

Response: For those areas that have air quality data showing attainment of the pre-existing PM₁₀. standards at the time of the effective date of the revised PM standards, the requirements under the pre-existing PM₁₀ standards will continue to apply until these areas have incorporated into an approved SIP any and all control measures that were adopted and implemented at the State level to meet the pre-existing PM₁₀ NAAQS. It is the Agency's belief that continued implementation of these measures will help to maintain PM air quality at current levels and assure continued public health protection until the States have had an opportunity to deploy their PM_{2.5} monitoring network, reassess their problem, and adopt and implement, as necessary, additional controls to address the revised PM NAAQS. In addition, these areas must have an approved section 110 SIP for the purposes of implementing the revised PM NAAQS (this includes both PM₁₀ and PM₂₅). The section 110 SIP must generally provide for implementation, maintenance, and enforcement of the NAAQS. Consequently, each State should review and revise, as appropriate, their section 110 SIP for the purpose of implementing the revised PM NAAOS. In those instances where the State believes that the existing Federally approved section 110 SIP is adequate to implement the revised PM NAAQS, the EPA intends to accept a letter from the Governor or his designee certifying that the section 110 requirements are met. EPA will issue more detailed guidance in the near future addressing these issues.

Once these requirements are met, EPA will take action to revoke the pre-existing PM₁₀ NAAQS for that area and delete the section 107 designation for the pre-existing NAAQS. Designations for the revised PM₁₀ NAAQS will take place in 2000 based on three complete

calendar years (1997-1999) of data.

50. What will happen to areas that have violated the existing PM₁₀ 24-hour standard, but have not yet been designated nonattainment?

Response: If the area is violating the pre-existing PM_{10} standard as of September 16, 1997, based on air quality data collected between 1994-1996, then the area would be subject to the section 172(e) no backsliding rule. Section 172(e) requires EPA to promulgate a rule within 12 months after the standard is relaxed that calls for controls which are no less stringent than those controls required under the pre-existing, more stringent standard.

51. Will areas with previously approved maintenance plans for the existing PM_{10} standard be required to continue implementation of these plans? If not, as of when? Will the SIP relaxation requirements of section 110(l) or section 193 apply?

Response: For those areas which have not been redesignated to attainment, but which have approved part D SIP's, as well as those areas which were redesignated to attainment and are currently implementing their section 175A maintenance plans, no further part D submission or approval is necessary. The State must, however, continue to implement the requirements adopted under the section 175A maintenance plan. In addition, these areas must have an approved section 110 SIP for the purposes of implementing the revised PM NAAQS. Once EPA has made a determination that these requirements have been satisfied, EPA will take action to revoke the pre-existing PM₁₀ standard for these areas. Any Agency rulemaking on SIP relaxations will be subject to all requirements of the CAA including sections 110(l) and 193.

52. How will EPA address areas that violate the revised PM_{10} standards?

Response: Designations for PM₁₀ under the revised standards are required by the Clean Air Act to take place within 3 years of promulgation of the NAAQS. EPA intends to use the data for the calendar years 1997, 1998, and 1999 to make designations. These data should be collected and reported to the EPA's Aerometric Information Retrieval System (AIRS) at both standard temperature and pressure (STP) and at local, ambient conditions until the pre-existing PM₁₀ standard has been revoked for that area at which time only local, ambient conditions will be required. Because the 1997 PM₁₀ data were reported at STP and the new standard requires local, ambient data, EPA will "unadjust" the previously reported data to avoid placing the burden on the States. Those States that elect to submit their actual local, ambient condition data to AIRS for the entire 1997 calendar year are free to do so, and these data will supersede EPA's estimates. Pursuant to subpart 4 for PM₁₀, SIPs for areas designated nonattainment are due within 18 months of the designation.

53. What criteria will be used and what process followed to revoke the existing PM₁₀ standard? On what schedule will this occur?

Response: The Agency has decided that monitoring data collected and reported to the AIRS database (at standard temperature and pressure conditions) between 1994 and 1996 will be used in making attainment determinations for the pre-existing PM₁₀ NAAQS. For areas that have data showing attainment of the preexisting PM₁₀ NAAQS, the standard will be revoked once the state has verified that they have an EPA approved SIP that embodies all State-adopted and implemented PM₁₀ measures and an EPA approved section 110 SIP for the revised PM NAAQS. The standard will be revoked for an area as soon as the State can meet the requirements outlined above. In areas not attaining the preexisting PM₁₀ standard, EPA is required under section 172(e) of the Act to promulgate a rule within 12 months after the standard is relaxed that calls for controls which are no less stringent than those controls required under the pre-existing, more stringent standard.

54. What kinds of areas will be eligible for revocation of the standards?

Response: Subject to the response to question 53, all areas of the country are eligible for revocation of the pre-existing PM_{10} NAAQS. As indicated in the response to question 53, all areas which have PM_{10} air quality data will be divided based on whether or not the data show attainment of the pre-existing PM_{10} NAAQS as of September 16, 1997, and the process will evolve from this determination. Areas currently not having operational PM_{10} monitors will be considered "clean areas," and thus be subject to the same provisions outlined for monitored areas with data showing attainment of the pre-existing PM_{10} standards

55. What previously existing requirements will no longer apply as a result?

Response: All PM₁₀ measures adopted into the SIP and implemented will continue to be required.

56. What requirements will EPA promulgate under Section 172(e) to prevent backsliding as a result of relaxation of the PM_{10} standard? How will EPA do this in a manner that is consistent with the President's directive to be reasonable and limit paperwork?

Response: For those areas that are not attaining the pre-existing PM10 standards of September 16, 1997, EPA must promulgate a rule pursuant to Section 172(e) of the CAA to assure that no backsliding will occur. Section 172(e) provides that, if the Administrator relaxes a NAAQS, she shall promulgate requirements applicable to all areas that have not attained that standard as of the date of the relaxation. Those requirements should provide control measures no less stringent than would have been required under the more stringent PM-10 standard. EPA intends to work with the State, local, and tribal agencies in developing the rule.

57. How will EPA reconcile the apparent inequities between areas that attained the existing PM₁₀ standards and areas that never achieved attainment status, once the existing standard is revoked and both are considered attainment under the new standard?

Response: In both types of areas, the goal of attaining the pre-existing PM₁₀ NAAQS has been met. Areas redesignated to attainment only need to submit a section 110 SIP for purposes of implementing the new PM NAAQS before the pre-existing PM₁₀ NAAQS is revoked. Areas that have not been redesignated to attainment must ensure all measures adopted and implemented at the State level to control PM₁₀ are included in the approved SIP and submit a section 110 SIP for purposes of implementing the new PM NAAQS before the pre-existing PM₁₀ NAAQS is revoked. In this manner, the control measures which were adopted and implemented and resulted in attainment of the pre-existing PM₁₀ NAAQS will be codified in the SIP. EPA believes these action are essential for the purposes of protecting public health during the transition to implementing the revised PM standards.

PM_{2.5} Monitoring

63. What incentives are there for monitoring?

Response: In addition to the incentives listed in the response to question 46, those for $PM_{2.5}$ monitoring would include:

- ! utilizing §103 (non-matching) funds to support the first two years of implementation, including monies for speciation of samples to assist in source identification, etc.,
- ! taking advantage of the 2-year moratorium on the use of special purpose monitoring (SPM) data codified as 40 CFR 58.14 (b); this moratorium allows a State/local agency to collect PM_{2.5} data using a federal reference or equivalent method for up to 2-years without using the data for making an area attainment or nonattainment with the PM_{2.5} NAAQS,
- ! noting that data gathered at monitors that are representative of relatively unique population-oriented micro-scale or localized hot spot, or unique population-oriented middle-scale impact sites are only eligible for comparison to the 24-hour NAAQS and not the annual standard (40 CFR 58, Appendix D, Section 2.8.1.2.3),
- 64. With monitoring efforts focusing on urban areas, how will EPA, states and localities respond to rural residents who question whether their health is being given as much consideration as that of city residents?

Response: The new $PM_{2.5}$ monitoring rules focus on population-oriented monitors as well as regional transport and background monitoring which is a relatively new strategy for national ambient air monitoring programs. In addition, EPA is allocating additional funds and monitoring sites according to the State's population and encouraging the States to establish these sites in other than urban areas. In particular, the EPA is encouraging States to locate sites in small communities and in rural environs in order to quantify the transport of $PM_{2.5}$.

65. How will the phase-in of the PM_{2.5} monitoring network affect spatial averaging and the

attainment/nonattainment status of an area?

Response: The Presidential Directive of July 16, 1997, recognizes that three years of complete PM_{2.5} data will be used to determine whether areas meet or do not meet the PM_{2.5} NAAQS, and that these data will not be available from all sites until after 2002. In recognition that the EPA must make designation determinations within 2 to 3 years of revising a NAAQS, the Directive states that the EPA will issue "unclassifiable" designations for PM_{2.5} which will not trigger the planning or control requirements of part D of Title I of the Clean Air Act. Nonattainment designations using three years of complete PM_{2.5} data will be made beginning in 2002 using the earliest data, and continuing into 2005.

66. For what, exactly, can and can't funds appropriated by Congress for $PM_{2.5}$ monitoring be used?

Response: The U.S. EPA is providing funding for all categories of labor and equipment necessary to fully implement a 1,500 site PM_{2.5} network, including both capital expenditures and operation and maintenance costs over the two-year implementation schedule. Included in these categories are the purchase and delivery of PM_{2.5} samplers (Federal Reference and Equivalent methods, single-channel and sequential varieties, portable quality assurance audit samplers, continuous samplers, speciation samplers), filter media for each variety of sampler, filter acceptance testing costs and shipping, spare parts, data management expenditures (including data loggers), laboratory support activities and equipment, meteorological monitoring equipment and operation and maintenance costs, filter weighing room upgrade costs, characterization (saturation) studies needed to design the PM_{2.5} networks, filter speciation analysis costs and equipment, and other categories of labor, capital, and operation and maintenance related to establishing the PM_{2.5} network.

Funds appropriated by Congress for $PM_{2.5}$ monitoring cannot be used to fund programs not related to the $PM_{2.5}$ monitoring program.

67. For whatever portion of the monitoring network Congress does not fund, will EPA fund this out of Section 105 funds and must this funding be matched?

Response: The U.S. EPA has committed to providing 100% of the funding for the hardware, operation, and maintenance costs associated with the complete PM2.5 ambient air monitoring network. EPA's objective is to have the major portion of the network in place and operational by December 31, 1999. Congress has provided funding for the network via the Section 103 grant mechanism for FY 1998, and it is anticipated that Congress will provide additional funding for the completion of the PM2.5 network. EPA intends to request funds for the hardware, operation, and maintenance costs associated with the complete 1500 site PM2.5 network for FY 1999 and beyond.

68. Will the new funds (whether under Section 103 or 105) appropriated by Congress for $PM_{2.5}$ monitoring be base or supplemental?

Response: In previous years, the State grants have been comprised of base funds and increment funds. For FY 1999, following decisions from the STAPPA meeting in Sagamore, NY, it has been determined that we must structure the grant allocation to address program priorities while recognizing that certain activities will require long term funding while other activities will be more dynamic and of shorter duration. Therefore, the terms base and increment become obsolete.

The FY 1998 funding for the PM 2.5 networks is comprised of a small amount of reprogrammed FY 1997 funds plus new funds for FY 1998. EPA reprogrammed \$6.935 million in grant funds from PAMS, PM₁₀ monitoring, market based incentives, and data delivery to form the basis for our FY 1998 budget request. In the President's budget request for FY 1998, an additional \$4.0 million was requested for PM_{2.5} monitoring. Congress added \$24.743 million for PM monitoring and data collection in addition to the President's request of \$10.935, for a total funding package of \$35.678 million in FY 1998.

Other PM_{2.5} Issues

58. The Presidential Directive indicates that no new control measures for PM_{2.5} will be imposed until after the completion of the next review of the standard. How is this consistent with the principles of no backsliding and continued progress?

Response: The Presidential Directive's statement on no new control measures for $PM_{2.5}$ until completion of the next review cycle is consistent with the principles of no backsliding and continued progress. Since it will take a number of years for states to identify $PM_{2.5}$ problem areas and identify controls for those areas, EPA believes that it is necessary for current PM_{10} areas, including those that may have already attained the pre-existing PM_{10} standards, to maintain their current PM_{10} implementation efforts for the purpose of protecting public health during the transition to implementing the revised PM NAAQS.

59. What criteria will be used for designating areas as "unclassifiable" for PM_{2.5}?

Response: As stated in the Presidential Directive, in 1999 (2 years after setting the new PM_{2.5} NAAQS), EPA will issue "unclassifiable" designations for PM_{2.5} for all areas of the country. The "unclassifiable" designation will be made due to the lack of adequate air quality monitoring data necessary to make attainment/nonattainment determinations for PM_{2.5}. These designations will not trigger the planning or control requirements of part D of Title I of the Act.

60. Will there be a transitional classification for $PM_{2.5}$?

Response: As discussed in the Presidential Directive, as detailed PM2.5 air quality data and data on the chemical composition of PM2.5 in different areas become available, the EPA will work with the States to analyze regional strategies that could reduce PM2.5 levels. Local governments and local businesses should not be required to undertake unnecessary planning and local regulatory measures if the problem requires action on a regional basis. Therefore, if it is determined that a regional transport strategy is needed, EPA will consider whether a transitional classification would be appropriate.

61. How will new violations of the $PM_{2.5}$ standard be addressed after initial designations are made?

Response: In 1999, the Administrator will designate the entire country as "unclassifiable" for PM_{2.5}. The next review of the PM NAAQS will be complete in 2002 and designations will be made between 2002 and 2005 when 3 years of quality assured PM_{2.5} monitoring data is available for an area, but no later than 2005. Any new areas showing violations of the PM_{2.5} NAAQS after this initial designation period will be redesignated from unclassifiable to nonattainment in accordance with section 107 of the CAA.

62. What is the PSD program for PM_{2.5} for the next 5 years?

Response: Currently, the lack of necessary technical tools to calculate emissions of PM_{2.5} and related precursors, and to adequately project ambient concentrations of PM_{2.5} make a PSD review for PM_{2.5} infeasible. Consequently, it is EPA's intention that the PSD program for PM_{2.5} rely on the review of PM₁₀ as a surrogate for the next 3-5 years. On October 23, 1997, EPA issued a policy memorandum indicating the need for this surrogate approach under the federal and State PSD programs due to the noted technical deficiencies. EPA anticipates that the policy will remain in effect for as long as 5 years, during which time essential projects will be completed. These projects include: development of emissions factors for PM_{2.5} and precursors of secondarily-formed PM_{2.5}, testing and validation of dispersion models which take into account secondarily-formed PM_{2.5} and its transport over long distances, and the completion of a national network of air quality monitoring stations designed to collect ambient PM_{2.5} data for use in designating areas which do or do not attain the new standards and developing control strategies for areas which do not attain. Thus, EPA intends to require that the NSR programs focus only upon the review of PM₁₀ during the next 3-5 years to directly protect the PM₁₀ NAAQS in effect at such time and to indirectly protect the PM_{2.5} NAAQS.

Other PM Issues

69. Does the natural events policy apply to the revised PM_{10} standards and the new $PM_{2.5}$ standards?

Response: The natural events policy applies to the PM10 standard. However, the Agency must and will revise the policy, as appropriate, to extend its applicability to the PM2.5 standards.

70. How will EPA accommodate substantial increases in prescribed burning by Federal Land Managers and the impact of this burning on PM₁₀, PM_{2.5} and regional haze?

Response: EPA recognizes the fact that fires have always been and will continue to be an integral part of healthy forests and ecosystems. Unplanned wildland fires, such as catastrophic wildfires, can pose serious threats to property and public health and safety. Wildfires may cause extended periods of intense smoke, which contains particulate matter that can cause serious health problems, especially for people with respiratory illness. It can also affect visibility, a particular concern in national parks, forests and wilderness areas. On the other hand, managed fires (i.e., prescribed burns) seek to minimize smoke impacts in the short term, and in the long term the ecosystems benefits they provide (e.g., reduced fuel loadings, more natural forest systems that are more fire resistant, etc.) also help to reduce smoke impacts by reducing wildfire occurrence.

We are working closely in partnership with the U.S. Departments of Agriculture and the Interior, as well as state land managers and air quality officials to develop a policy that will ensure that the necessary managed fires occur in a way that minimizes air quality problems. It will establish recommended practices for managing smoke impacts on air quality from wildland fires. It will also outline how land owners/managers can work cooperatively with state and local air pollution control officials to conduct integrated planning to successfully manage ecosystem health and air quality concerns. This policy is being developed considering the 1996 recommendations from the Grand Canyon Visibility Transport Commission. We expect to issue the Wildland Fire/Air Quality Policy early next year.

REGIONAL HAZE

71. What will be the criteria for establishing alternative progress determinations under the regional haze program?

Response: As EPA indicated in the preamble to its notice of proposed rulemaking for regional haze, the criteria for alternative progress targets include those identified in section 169A of the Act for consideration in determining "reasonable progress." These criteria include the following: the costs of compliance with the reasonable progress target, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, the remaining useful life of any existing sources subject to such requirements, and the degree of improvement of visibility which may reasonably be anticipated to result from application of control technologies or other measures.

72. How will EPA notify States that they must control for Class I areas in other States?

Response: The Act provides that a State is to establish or revise a visibility SIP if it has sources of emissions which "may reasonably be anticipated to cause or contribute to any impairment of visibility" in any mandatory Class I federal area. Based on evidence of the long range transport of fine particles, EPA's proposal extends the applicability of the regional haze program to all States. States without mandatory Federal Class I areas are encouraged to work with States whose mandatory Federal Class I areas may be affected by transport. The proposal also describes the regional nature of visibility impairment and the interrelationships between the ozone, PM, and regional haze problems. EPA encourages the States to conduct technical planning and control strategy development activities on a regional basis for all three of these programs. Part of this planning work likely will involve modeling efforts to better estimate the contributions of visibility-impairing emissions from each State to mandatory Class I federal areas, located both within and outside of these States, similar to the activities undertaken by OTAG and the Grand Canyon Visibility Transport Commission (GCVTC). EPA envisions that haze analyses would be linked to regional analyses for NAAQS implementation to the extent possible. Technical tools such as MODELS3 and REMSAD for conducting regional modeling of PM and regional haze should be useful in estimating contributions from one State to another. These tools are currently under development. In addition, EPA is currently developing additional guidance on regional planning approaches. This guidance on regional planning is scheduled for release in early 1998.

73. What is the PSD program for regional haze for the next five years and beyond?

Response: The proposed program to address regional haze visibility impairment in mandatory Class I Federal areas is not intended to cause any changes to the existing PSD rules. Under the current PSD program, when a Federal Land Manager identifies visibility as an air quality related value in a Class I area, a proposed PSD source may be subject to a visibility analysis to determine whether the source will cause or contribute to any potential visibility impairment. If the Class I increment is not exceeded but the Federal Land Manager demonstrates, and the State concurs, that the proposed PSD source will adversely affect visibility, then some mitigative action to prevent or minimize future visibility impairment may need to be taken as a condition to issuance of the PSD permit. This visibility review processes will not be altered as a result of the proposed regional haze program. Regional haze is the cumulative product of emissions from many sources over a broad area. Consequently, one of the primary features of the regional haze program is the development by States of appropriate emission reduction strategies which account for the impacts of existing source emissions together with anticipated emissions growth from new and modified sources. The proposed regional haze rules do not propose regulatory or procedural changes to the existing visibility new source review program (or corresponding visibility elements of the PSD program) but contemplate that States can implement these existing programs to address proposed sources that may impact regional haze visibility impairment in a mandatory Class I Federal area in ways that are consistent with the States' long-term strategies.

74. Are only PSD sources subject to "no degradation of cleanest days" analysis? If not, which new/modified sources are also subject?

Response: No. Visibility degradation may occur as a result of emissions from any type of source (such as area and mobile sources). Consequently, State and regional strategies to meet the reasonable progress targets of no degradation of clean days and a 1 deciview improvement every 10 (or 15) years in the worst days in all Class I areas can and should consider haze-causing emissions from all existing <u>and</u> new sources, including emissions from major and non-major sources, urban growth, mobile, and area sources. The States and regions would have flexibility in developing long-term strategies to achieve these targets.

75. What opportunities are there for a BART-like process in meeting the reasonable progress target?

Response: BART is a process involving assessments of the available technology, costs of compliance, energy and nonair environmental impacts of compliance, any pollution control equipment in use at the source, the remaining useful life of the source, and the degree of improvement in visibility that may reasonably be anticipated to result from the use of such technology. Although BART applies only to a limited set of major stationary sources reasonably anticipated to contribute to regional haze impairment in mandatory Class I federal areas, under the proposal a State or regional process involving technological control assessments similar to BART for other sources could be used as an element of long-term strategy requirements and reasonable progress goals. The proposal provides that strategies to meet reasonable progress targets will likely need to consider BART and non-BART sources, as well as any other emission reductions from existing or planned strategies under other air quality programs. Long-term strategies to meet reasonable progress targets need to include sufficient measures to meet these targets.

76. How does EPA intend to fund an expanded visibility monitoring network should a state be required to implement one?

Response: Currently, the IMPROVE visibility monitoring network is funded and managed cooperatively by EPA, the National Park Service, the U.S. Forest Service, the Fish and Wildlife Service, the Bureau of Land Management, and the States. EPA believes the need for "representative" monitoring of visibility in mandatory Class I federal areas can be compatible with the objective of establishing background and transport monitoring for PM-2.5. Therefore, under section 103 of the CAA, EPA plans to fund expansion of the IMPROVE monitoring network to also serve as background and/or transport sites for implementation of the PM-2.5 NAAQS.

77. What federal control programs/national measures are contemplated, especially for areas

where PM 2.5, Title IV and regional strategies may be of limited help?

Response: At this time, EPA does not anticipate developing national measures beyond those to address PM-2.5 which are specific to the regional haze program. Several federal control measures called for under the CAA are under development, however, and are expected to result in visibility improvements across the country. Consistent with the recommendations of the Grand Canyon Visibility Transport Commission, these measures include several mobile source programs (49-state low emission vehicle standards, heavy-duty engine standards, non-road standards, etc.), and the development of policies for the management of wildland fire emissions. EPA will continue to assess the need for national measures by evaluating the regional haze impacts and benefits expected from these national programs and policies as well as from the implementation of measures to implement the acid rain program and PM-2.5 NAAQS.

78. How will BART be applied?

Response: EPA has proposed no change in the requirements for BART as applied to "reasonably attributable" sources. EPA has requested comment on how BART should be specifically implemented under a regional haze program. In order to provide the necessary basis for understanding and establishing the role of BART in SIP strategies to achieve reasonable progress for regional haze, the proposed rule would require States initially to perform assessments of potential emission reductions from all appropriate BART sources in the State and contributing to impairment in Class I areas within the State. The proposal states that this information should then be used in regional modeling and control strategy development for implementation of the regional haze program, as well as for the PM-2.5 and ozone NAAQS.

79. What are the monitoring objectives and protocols?

Response: The objectives of the IMPROVE visibility monitoring network are: 1) to establish current and long-term visibility conditions in Class I areas, including measurement of the "best" and "worst" days; 2) to identify chemical species and emission sources responsible for existing manmade visibility impairment; and 3) to document long-term trends. Detailed monitoring protocols for aerosol, optical, and scene (camera) monitoring have been developed and enhanced under the existing IMPROVE program since 1988. EPA is currently exploring the importance of consistency in sampling frequency between IMPROVE visibility monitoring and PM-2.5 monitoring but does not anticipate significant changes to the IMPROVE protocols.

80. How will spatial averaging, seasonal and temporal differences in regional haze make-up, levels and distribution be accounted for?

Response: The proposal does not specifically address the concept of spatial averaging. However, because of the regional nature of haze, visibility measurements in class I areas are typically representative of a fairly broad spatial area. In addition, aerosol measurements are often

correlated with transmissometer measurements, which measure light extinction over significant sight paths, sometimes more than a kilometer. The framework set forth in the proposal for achieving continual improvement in the worst visibility days and no degradation in the best visibility days is intended to provide an improvement in the overall visual air quality distribution each year. This long-term approach should also result in seasonal improvements as well. In addition, the proposed approach for periodic reviews of progress is designed to take into account some degree of interannual variability.

81. How will RP goals apply to neighboring states that contribute? What if states set different goals?

Response: Developing strategies to achieve reasonable progress requires an assessment of the impacts of emissions and controls across the entire region which contributes to visibility impairment in Class I areas. Under the proposal, EPA expects that States containing Class I areas, in consultation with the Federal Land Managers, will establish baseline visibility conditions and define the conditions meeting the CAA goal of no manmade impairment. Following this, EPA envisions that planning would be conducted through a multi-state, cooperative process. EPA encourages States through this process to coordinate the establishment of reasonable progress targets for specific class I areas with other contributing States, and to coordinate the development of strategies to meet such targets. For a particular class I area or group of areas, all contributing States would need to address in their SIPs how controls on emissions from sources within those States contribute to meeting the reasonable progress target(s). Although emission reductions and schedules for compliance may differ among participating States, they must demonstrate achievement of the reasonable progress goals established through this cooperative process.

82. What options or alternative will EPA consider for timing and frequency of plan revisions?

Response: EPA has proposed a 3-year schedule for plan revisions. The proposal also solicits comments on an alternative 5 year SIP revisions schedule. In addition, comments are requested in general on all aspects of these requirements.

83. How will EPA's reconstruction formulae for calculating deciviews accommodate regional differences in the make up of regional haze?

Response: Reconstructed light extinction is a method currently used by the IMPROVE network to calculate visibility impairment from concentrations of individual fine PM species (e.g., sulfate, nitrate, organic and elemental carbon, fine soil). Impairment is also measured directly from nephelometer or transmissometer data. The same dry light scattering efficiency is used nationally for each fine PM constituent. However, the scattering efficiency of sulfate and nitrate is adjusted by seasonal relative humidity factors. Thus, the formula for reconstructed light extinction specifically accommodates regional variations in haze due to important climatic factors.

Analyses of IMPROVE data have shown a high degree of correlation between this reconstructed light extinction methodology and direct measurements of light extinction.

84. Will EPA consider measured emissions reductions as an alternative to measured impairment and progress if so how?

Response: As stated in the proposal, EPA believes that periodic reasonable progress determinations should be expressed in terms of an environmental indicator of visibility impairment that is based on actual air quality measurements. Tracking of emissions alone does not provide a comparable indicator of environmental improvement for several reasons. For example, a given reduction in emissions of two different pollutants can have very different consequences in terms of visibility due to differing extinction efficiencies of particle types and regional variations in key factors such as humidity. If during a reasonable progress review a State finds it is not meeting the progress targets for a Class I area, the proposal provides for the State to review actual emissions reductions achieved as compared to planned reductions for meeting the target. The State would need to revise its strategies if planned emissions reductions had not been achieved. EPA also requested comment on alternate approaches to measuring reasonable progress and will consider those in finalizing the rules.

CROSS-CUTTING ISSUES

Regional Strategies

88. How will the impacts of transport be addressed under the new/revised standards and regional haze program and related SIP revisions? How, if at all, have the concepts of Area of Influence (AOI) and Area of Violation (AOV) been incorporated?

Response: Many States have found it difficult to demonstrate attainment of the ozone NAAQS due to the widespread transport of ozone and its precursors. Significant work in this area was performed over the last 2 years by the Ozone Transport Assessment Group which was established by ECOS. The Agency has recently proposed a SIP call for 22 States and the District of Columbia to reduce NOx emissions in those areas to address the ozone transport problem in the Eastern U.S. This proposed rule clearly shows that EPA's commitment to reducing emissions from sources that may be located outside nonattainment areas but which contribute significantly to the transport of pollution and to violations of the NAAQS in downwind areas. Controlling emissions outside the boundaries of the nonattainment areas is consistent with aspects of the AOI/AOV concept.

EPA also believes that the transport of the precursors of PM2.5 contribute to both PM2.5 and regional haze problems. There is significant work necessary in this area to better understand issues such as the significance of these contributions, differences in transport in different regions

of the U.S., the major sources of the precursors and how the precursors react in the atmosphere to form to PM2.5 and contribute to PM2.5 concentrations. EPA supports the development and funding of up to 5 regional technical centers to perform work in these areas and is looking for input from the States on the appropriate number of centers and the geographic areas they would cover. EPA also supports the formation of regional planning groups in early 1998 to address interstate transport issues but does not see that these groups will need specific funding other than as determined annually by the participating States. EPA believes these centers and groups can provide input into how the AOI/AOV concept might be used for addressing PM2.5 and regional haze as EPA moves forward to designate PM2.5 nonattainment areas and States move forward to develop controls strategies to address transport for the new PM2.5 standard and Regional Haze program.

89. What roles will states/localities, EPA, RAMPs, technical centers for modeling and Federal Land Managers have?

Response: As discussed above, EPA encourages States and tribes to form regional planning groups in early 1998. The regional planning bodies should be contiguous, multistate areas which have common air quality characteristics and share common air quality concerns. The states and tribes should also work together in conjunction with EPA in identifying the appropriate number of regional technical centers. The States and tribes should work together using these technical centers to undertake the air quality analyses for developing control strategies for PM2.5 and regional haze. States and tribes should begin as soon as possible after formation of the technical centers to compile the necessary emission inventories, and complete monitoring and modeling that will need to be done early in the process. The regional planning groups will need to act quickly to address organizational, administrative, and procedural issues including the ongoing operation of the planning body and assigning leadership roles and responsibilities among the States and tribes. The regional planning body's initial activities should focus on establishing regional technical centers. These centers should provide technical support to the planning body by performing duties such as coordinating State emission inventories and providing regional modeling capabilities. As noted above, EPA believes there should be no more than 5 regional technical centers.

EPA would like input from the States and tribes on the membership, organizational structure and number of the planning bodies and the technical centers.

90. What is the incentive to dedicate resources to RAMP efforts? What does EPA consider to be the role and value of such efforts?

Response: As discussed above, EPA believes that regional transport of air pollution plays a significant role in PM2.5 and regional haze problems. Regional technical centers and planning groups are essential to doing joint analyses on these issues and on developing better understandings of these problems. By investing the resources up front and working together,

States and tribes can ensure that their strategies for achieving the PM2.5 standard and the regional haze targets reflect the most cost-effective approaches to reducing emissions (locally and regionally) that contribute to air quality problems.

Integrated Implementation

97. How does EPA plan to integrate implementation of the ozone and PM NAAQS and the new regional haze program? How will EPA align timelines?

Response: EPA recognizes that administrative incentives and guidance for NAAQS and regional haze program integration can provide significant benefits. The EPA will strive to harmonize implementation of regional haze and PM 2.5 programs whenever possible. Such new administrative guidelines will address monitoring, modeling, and inventories. Speciated monitoring data collected across a broad geographic area is also needed to support better integrated analyses and control strategy development. As discussed earlier, EPA is committed to funding the gathering and analysis of such data for PM_{2.5} and regional haze.

Initial SIP timelines and milestones for the different pollutants cannot be synchronized due to different statutory and data requirements. However, integrated evaluation is not necessarily predicated on integrated timelines. EPA will pursue integration in administrative and analytic components (such as guidance regarding inventories, air quality modeling and monitoring network development) while acknowledging that the timelines cannot be made to coincide. After the programs have been under way for a few years, EPA will examine any opportunities for midcourse corrections to harmonize timelines. EPA is also pursuing increased coordination in emissions data gathering and reporting. This is needed because of the overlap in the pollutants and sources that contribute to violations of the ozone and PM_{2.5} standards and to regional haze. Increased integration in emissions data reporting is being addressed through the "Consolidated Emission Reporting Rule".

98. How will EPA ensure the use or maximization of integrated strategies that benefit all three air quality programs (ozone, PM and regional haze) regionally and nationally?

Response: EPA recognizes the inherent chemical and physical linkages between these three air quality programs. Generally, the conditions and processes conducive to forming PM2.5 also degrade visibility. Therefore, an explicit relationship exists between PM and visibility and, by extension, between ozone and visibility. Thus, the selection of specific analytical (e.g. statistical) and numerical (e.g. gridded models) methods, which would allow for the integrated assessment of the impacts (in a directional sense) of common precursors will be used when they are available. EPA will continue to work with state, local and tribal agencies to identify opportunities to integrate these efforts.

99. The Presidential Directive calls for initial SIPs for the 8-hour ozone standard to be submitted in 2003 and PM_{2.5} SIP's in 2005-2008. Where common pollutants (e.g., NO_x) affect both planning efforts, will EPA allow for common planning timelines (while still retaining different attainment dates)?

Response: The Presidential Directive recognizes that there are common linkages between ozone and $PM_{2.5}$ (e.g., NOx), but the planning efforts for these pollutants will not be integrated. Reductions for ozone will be beneficial in many areas for $PM_{2.5}$ attainment and can be taken into account in the later development of $PM_{2.5}$ control strategies. For example, NOx reductions resulting from the ozone program and SOx reductions resulting from the acid rain program are expected to result in overall air quality improvements for $PM_{2.5}$ and regional haze.

Designations/Classifications

85. Section 172(a)(2)(A) of the Clean Air Act requires that "[t]he attainment date for an area designated nonattainment with respect to a national primary ambient air quality standard shall be the date by which attainment can be achieved as expeditiously as practicable, but no later than 5 years from the date such area was designated nonattainment under Section 107(d), except that the Administrator may extend the attainment date to the extent the Administrator determines appropriate, for a period no greater than 10 years from the date of designation as nonattainment, considering the severity of nonattainment and the availability and feasibility of pollution control measures."

What criteria will EPA use to apply this provision and determine attainment dates for nonattainment areas?

Aside from the transitional classification for ozone, will there be different classifications of nonattainment for ozone, PM_{10} and PM_{25} ?

Response: The provision of Section 172(a)(2)(A) is the basis for the implementation plan's statement that attainment must be achieved "up to 10 years" from the nonattainment designation. Based on current information, EPA expects that many areas that do not qualify for the transitional classification may need the full 10 years to attain the new standard. EPA intends to develop, by the end of 1998, criteria for setting the attainment dates for nonattainment areas.

Section 172(a)(2)(C) states that the Administrator may provide "[n]o more than 2 one-year extensions" of the attainment date, consistent with the requirements of that subparagraph. EPA plans to develop guidance on conditions under which these extensions may be granted that take account of the revised form of the 8-hour ozone NAAQS.

In addition to the transitional classification, EPA is also considering retaining a separate classification for non-metropolitan areas that are violating the standard but where ". . . emissions within the area do not make a significant contribution to the ozone concentrations measured in the

area or in other areas." [See section 182(h)(2) of the Clean Air Act.] These areas have in the past been called "rural transport areas." Other classifications may be used if deemed appropriate, but none have been identified at this point.

86. Section 172(a)(2)(C) of the Clean Air Act allows the EPA Administrator, upon application by a state, to provide an area with up to two one-year extensions of an attainment date if the area has complied with all applicable requirements and commitments in the applicable SIP and "in accordance with guidance published by the Administrator, no more than a minimal number of exceedances of the relevant national ambient air quality standard has occurred in the area in the year preceding the Extension Year." How and when does EPA plan to apply this provision?

Response: EPA will develop guidance by the end of 1998 for implementing this attainment date extension provision of the Act. The guidance would cover conditions under which the extensions may be granted. It should be noted that the 8-hour ozone standard is a concentration-based standard, not an exceedance-based standard like the 1-hour standard. Therefore, EPA's guidance will have to reflect the form of the 8-hour standard.

EPA Guidance, Policies and Rulemakings

87. What guidance, policy documents and rulemakings will EPA prepare and issue over the next few years, and on what schedule, to implement the new/revised standards? What opportunities are there for state and local involvement in the development of these?

Response: The EPA plans to issue final implementation rules and guidance by 12/98. Major elements are:

Action	Dates
New source review rule for transitional areas	Proposed 3/98 Final 12/98
Conformity rules for transitional areas	Proposed 4/98 Final 12/98
Draft policy guidance	3/98 - 6/98
Final policy and technical guidance	12/98

The EPA is committed to working with State and local governments in the development of these rules and guidance. At the meeting EPA would like to discuss how this goal can be accomplished. Further, additional guidance needs will arise that EPA cannot anticipate at this

point. The EPA would like to work with State and local agencies on those issues as they arise.

National and Prescribed Control Measures

91. What action will EPA take, and on what schedule, to promulgate national controls for sources that are either exempt from state/local control or best controlled at the national level?

Response: The EPA is in the process of developing the following national measures:

<u>MEASURE</u>	<u>DATE</u>
Architectural and industrial maintenance coatings national rule	Final rule, 1998
Consumer and commercial products national rule	Final rule, 1998
Autobody refinishing national rule	Final rule, 1998
Maximum available control technology (MACT) standards for hazardous air pollutants	1997 - 2000
Acid rain program	Phase II begins 2000; fully implemented by 2010
Transfer, storage and disposal facility regulations	All requirements must be met by June 1998
Onboard refueling vapor recovery (ORVR)	Phased in on new cars 1998 through 2000 model years. For trucks 2001 to 2006 model years
Voluntary national low-emitting vehicle standards (NLEV)	Final rule, June 1997. If the auto manufacturers and the OTC States opt in, the program will start in the 1999 model year in OTC States and 2001 model year nationwide.
Heavy-duty vehicle standards	NOx standard in place for 1998 and later model years. Additional diesel engine standards become effective 2004 model year.

<u>MEASURE</u>	<u>DATE</u>
Federal small engine standards, phase II	Phase II standards are expected to take effect in the 2001/2002 time frame.
Federal marine engine standards	Standards take effect in 1998 and are phased in until fully implemented by 2006 for new engines.
Federal locomotive standards	Standards begin January 1, 2001. A second phase begins in 2005.
Nonroad diesel engine standards	Tier II proposed in September 1997. This should go in to effect by 2001.
Tier 2 light duty vehicle standards	Under study which may lead to tighter standards no earlier than 2004 model year.

92. What credit can states and local areas take for national measures?

Response: Credit for national measures will be allowed in the same manner as currently allowed, viz., credit must be calculated on an area-specific basis. For new national measures that EPA issues, guidance for taking credit from resulting emission reductions are expected to accompany the new measures. Under certain circumstances in the past, EPA has allowed States to take credit for national measures in advance of their issuance; examples include the consumer and commercial product rule, the architectural and industrial maintenance coating rule, the auto body refinishing rule, and some off-road engine standard rules. EPA may continue this practice where circumstances warrant this.

93. What, if any, prescribed measures will states and local areas be required to implement?

Response: There are no specific prescribed measures imposed on state and local areas as a result of the revised NAAQS. There are measures which are required by titles II, III, and IV, which are not directly affected by the revised NAAQS (i.e., acid rain, MACT, and FMVCP).

Once areas are designated nonattainment for the revised NAAQS, subpart 1 requirements will apply to the revised ozone and new PM2.5 standards and subpart 4 requirements will continue to apply to the revised PM-10 standards. EPA will be developing guidance interpreting how

subpart 1 provisions such as requirements for reasonable further progress and RACM, will apply to the revised ozone and new PM2.5 standards.

Through rulemaking and guidance, EPA could require the application of specific control measures and/or programs. The issue of prescription of measures for the new NAAQS has been debated by the FACA implementation subcommittee; however, EPA has made no decision at this time relative to this subject.

94. Will there be CTGs under the new standards?

Response: Control techniques guidelines (CTG's) have in the past provided a presumptive norm for a level of emission control deemed "reasonably available control technology" or RACT. The development of CTG's, through research on the levels and costs of controls that are being applied to various source categories, is an expensive and time-consuming undertaking. EPA does not currently have plans to develop new CTG's. However, EPA would like to engage in a cooperative effort with State and local air pollution control agencies to develop updated compilations of the kinds of controls required in various States so that the air pollution regulatory community may share this information. This is similar to several efforts undertaken between 1993 and 1996 by STAPPA/ALAPCO with EPA assistance.

Clean Air Investment Fund

95. How will EPA encourage the use of concepts such as the Clean Air Investment Fund and what guidance will the agency provide on the development and implementation by States of such approaches?

Response: EPA will develop guidance for states and localities on the Clean Air Investment Fund (CAIF). This guidance will build on the ideas identified by the FACA Subcommittee. EPA will continue to solicit advice from members of this group as the guidance undergoes development. The guidance will provide wide latitude to states and localities so that they can adapt the clean air investment fund concept to their particular circumstances. The guidance will cover a variety of issues including the conceptual goals of the fund and examples of how it could be used, the applicability of the \$10,000 per ton of emission reduction limit mentioned in the President's Directive, and a discussion of environmental justice issues related to the CAIF.

96. How will EPA assess potential environmental justice issues associated with approaches like a Clean Air Investment Fund and what guidance will the agency provide to state and local agencies to ensure environmental justice if such approaches are implemented?

Response: EPA is currently evaluating how potential environmental justice concerns can be

addressed in its air pollution economic incentive programs. Concepts like the Clean Air Investment Fund raise many similar environmental justice concerns. For example, pollution sources from which a community may expect specified levels of emission reductions may not make all of those reductions, choosing instead to purchase emission reduction credits or paying into a clean air investment fund. The guidance which EPA will issue on the Clean Air Investment Fund will include a discussion of environmental justice issues.

Flexibility

100. How will EPA balance state/local desire for flexibility in how standards are achieved with the regulated community's request for a level playing field, while at the same time establishing a strategy that ensures that states and local areas live up to their obligations?

Response: The Presidential Directive sets forth principles that EPA will follow in balancing flexibility, the need for a level playing field, and the need for States and local areas to secure emission reductions needed to bring about healthy air quality. These principles are:

1) maintain the progress currently being made toward cleaner air and respect the agreements and technological progress already made by communities and businesses to pursue clean air; 2) reward State and local governments and businesses that take early action to reduce air pollution levels through cost-effective approaches; 3) respond to the fact that pollution can travel hundreds of miles and cross many State lines; 4) work with the States to develop control programs which employ regulatory flexibility to minimize economic impacts on businesses large and small to the greatest possible degree consistent with public health protection; 5) minimize planning and regulatory burdens for State and local governments and businesses where air quality problems are regional, not local, in nature; 6) ensure that air quality planning and related Federal, State, and local planning are coordinated; and 7) recognize the substantial lead time necessary for State and local governments and businesses to plan for and meet standards for a new indicator of PM.

In developing guidance to help States meet their obligations under the Clean Air Act, EPA will follow these principles. In addition, EPA hopes to incorporate new and innovative approaches that originated in the group of stakeholders set up under the Federal Advisory Committee Act.

Early Reductions

101. What types of incentives or regulatory approaches will EPA use to promote early reductions, prevention of new nonattainment areas and /or faster attainment of the standards?

Response: The President's Directive of July 16, 1997, describes the overall strategy of incentives

to do early planning and control to achieve cleaner air faster for the new ozone and PM standards. While there are several new ideas expressed in the President's directive (e.g. the transitional area concept) EPA has several existing incentive programs which have been used to promote early reductions. The Economic Incentive Program (EIP) rules issued in 1994 provide a broad framework of incentives which can be used by States to both promote early reductions and lessen the overall cost of reaching air quality goals. EPA is committed to updating the EIP with additional guidance by the end of 1998.

The well-known acid rain trading program is considered by many to be a success in both lowering the cost of meeting air quality targets and getting sources to consider the benefits of early reductions. EPA also issued a proposed Open Market Trading Rule in 1995 to further promote a different form of trading and several States are actively considering open market trading as part of their SIP strategies. Public comments have led EPA to revise the Open Market Trading Rule into a guidance format which should be issued in FY98.

EPA has also used its grant monies to promote new ideas which stimulate thinking about early reductions and improved compliance. For example, through its market-based incentive section 105 grants, EPA has helped several States fund demonstration projects which are now being used as part of compliance strategies or creative ways of getting reductions which otherwise may not occur.

The FACA subcommittee has also focused on how to promote early reductions. They have generated a paper with several additional ideas which EPA will consider incorporating into its guidance over the next year. These ideas include: 1) early action by EPA to publish the rules for the baseline for required reductions, 2) assuring that any early reduction program provides equitable future treatment for sources which opt into such a program and that recognition be given to these early efforts when designing mandatory reductions, 3) establishing a "safe harbor" program which would allow sources who reduce emissions early to have a grace period during which a regulatory agency would not seek additional reductions, and 4) improvements to existing trading programs (e.g. provide greater certainty that the value of banked reductions will not be reduced sometime in the future).

ATTACHMENT

Concept Paper on Implementing the New Source Review Program in Transitional Areas Under the 8-hour Ozone Standard

Purpose of Concept Paper

We, the Environmental Protection Agency, are committed to developing flexible, common sense approaches for implementing the New Source Review (NSR) program under the new 8-hour National Ambient Air Quality Standard (NAAQS) for ozone. Consistent with the implementation framework set forth in the President's July 16, 1997 Directive, we intend to minimize the changes States will need to make to their existing programs in ozone nonattainment areas that will be classified as transitional. This concept paper describes how we intend to address the NSR requirements under part D of title I of the Clean Air Act (the Act) consistent with the President's Directive and taking into account the regional nature of the ozone problem and its potential control strategies. We will incorporate provisions reflecting these approaches in a forthcoming rulemaking that we expect to propose by March 1998 and promulgate by December 1998.

Summary of Transitional Program Requirements

From the perspective of sources, transitional program requirements will be very similar to existing major source preconstruction review requirements under State Prevention of Significant

¹ The July 16, 1997 Directive is entitled "Implementation of Revised Air Quality Standards for Ozone and Particulate Matter."

Deterioration (PSD) programs. We expect only minor changes will be necessary to States' current permitting programs to accommodate these changes. New or modified major sources of ozone precursors in transitional areas would be subject to a major source threshold of 100 tons per year. Although transitional NSR programs will require that major new source growth be offset, in contrast to the current process where sources obtain offsets, sources will be able to rely on "pools" of emissions reductions generated by States through their regional or local control strategies. Consequently, the burden on individual sources for finding offsets will be eliminated. Changes to the Best Available Control Technology (BACT) analysis under the PSD program will take into consideration the regional nature of some pollutants, such as ozone formation. We expect this to result in technology decisions which will satisfy the Lowest Achievable Emission Rate (LAER) technology requirement for transitional areas.

Programs for Transitional Nonattainment Areas

One of the flexible, common sense strategies in the President's Directive is a new classification for areas that are attaining the 1-hour ozone standard, but not the 8-hour standard, by the year 2000. These areas may be classified as "transitional" ozone nonattainment areas if they meet certain requirements.

In the eastern United States, most new ozone nonattainment areas are expected to attain the new 8-hour standard solely by implementing control measures to comply with our rule for regional nitrogen oxide (NOx) reductions.² These areas are eligible to be classified as transitional if, by 2000, they (1) are meeting the 1-hour ozone standard, and (2) submit attainment plans that include control measures to achieve the required regional NOx reductions, and, for the very few areas that may need them, (3) submit any additional local control measures needed for attainment of the 8-hour standard. The attainment plan submittal date of 2000 for transitional areas is 3

² On October 10, 1997, EPA's Administrator signed a proposed rule that if finalized, would require 22 States and the District of Columbia to submit SIPs that reduce emission that contribute significantly to the regional transport of ozone.

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years earlier than is otherwise required for areas not meeting the 8-hour standard. Areas that are not subject to requirements for regional NOx reductions are also eligible to be classified as transitional if they (1) are meeting the 1-hour ozone standard by the year 2000, (2) by 2000 submit plans containing local control measures that will result in attainment of the 8-hour standard, and (3) provide for the implementation of these measures on the same time schedule as the regional transport reductions.

After making modest revisions to their programs for reviewing new and modified major sources, States will be able to use these programs to meet NSR requirements in transitional areas. Because a prerequisite for the transitional classification is that areas be in attainment of the 1-hour ozone standard, it follows that, in most instances, the existing programs in those areas will be State Prevention of Significant Deterioration (PSD) programs.

Several factors warrant a flexible approach for implementing NSR in transitional areas. Transitional areas, by definition, will not be violating the 1-hour ozone standard. Moreover, the vast majority of these areas will be able to attain the new 8-hour standard solely through regional NOx reductions and hence are only temporarily nonattainment. In order to receive the transitional classification, areas will need to submit an air quality plan based on the regional strategy and, if necessary, include additional measures demonstrating how the standard will be attained.

We believe that early adoption of attainment plans will lead to emissions reductions and, therefore, health benefits earlier than would otherwise occur. We believe the transitional classification for ozone nonattainment areas is authorized in light of the statutory authority Congress has provided under the Act and under general principles of administrative law and statutory construction. We have provided flexibility for areas in the past, and we have interpreted and applied the Act pragmatically, consistent with its objectives, in order to avoid imposing unnecessary burdens on States and sources. The transitional classification is consistent with these prior efforts, and it represents an application of those principles in a new context.

NSR Permitting Requirements

Under the Act, permits issued to major new and modified sources of ozone precursors in ozone nonattainment areas must meet NSR requirements set forth in part D of title I. Under EPA's interpretation of the Act, while part D subparts 1 and 2 apply to areas designated nonattainment for the 1-hour ozone standard, only subpart 1 applies for the new 8-hour standard. Consequently, the NSR requirements for transitional areas are set forth in section 173. Section 173 primarily requires that prospective new or modified major sources (1) obtain emissions reductions (i.e., offsets) to offset their projected increased emissions, and (2) comply with LAER. This section addresses these requirements as well as the major source applicability threshold, the pollutants that will be considered ozone precursors, and other NSR program requirements.

Emissions Offsets

A key provision of the part D nonattainment NSR program is that a new major source or major modification to an existing major source may be permitted in a nonattainment area only when its proposed emissions would not interfere with reasonable further progress (RFP) towards attainment of the applicable NAAQS. Typically, the permit applicant has been responsible for showing, among other things, that the increased emissions from the project will be offset by sufficient creditable emissions reductions from existing sources. This demonstration generally takes place in a source-specific review in which the permit applicant identifies and receives approval for offsetting reductions.

To qualify as NSR offsets, emissions reductions must (1) result from sufficient contemporaneous reductions in actual emissions,(2) be obtained from the same nonattainment area or another nonattainment area of equal or higher classification that contributes to the NAAQS violation in the area in which the source would be located, and (3) comply with other creditability criteria pertaining to the quantifiability, permanence, and enforceability of the emissions reductions. An offset may be secured from existing sources that agree to creditable and enforceable reductions of their actual emissions (such as through the installation of additional air pollution control devices, a switch to a cleaner fuel, or a curtailment in the level of operation),

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from sources that shut down, or from offset "banks" that some States have implemented to track emissions reductions.

In contrast to the current, source-specific process for obtaining an offset in most States, for implementation of the NSR program in transitional areas, we are encouraging States to rely on intra- or interstate "pools" of emissions reductions to meet the offset requirements of part D. Offset pools would be composed of actual emissions reductions that will be achieved as a result of regional (and sometimes local) NOx control strategies. States would allocate a subset of their emissions reductions generated as part of the regional strategy for the purpose of offsetting new source growth. States also would be responsible for managing the pool of offsets and their availability to individual sources. Hence, where a pool of offsets is available, the burden on individual sources for finding such offsets will be eliminated. Furthermore, in contrast to offset ratios ranging from one-to-one to one-and-a-half-to-one for the 1-hour ozone standard, we intend that emissions increases from new or modified major sources of ozone precursors in transitional areas would be offset with an equal actual emissions decrease, that is, with a one-to-one offset. This innovative approach to meeting the offset requirement should ensure no additional burden to sources compared with the existing PSD ambient impact requirements, because offsets will be drawn from a pre-existing designated pool.

We believe this approach is permissible so long as the use of such reductions as offsets is consistent with section 173 of the Act and the State's attainment strategy. For example, a State that will achieve a certain level of actual emissions reductions as part of its NOx regional transport strategy could allocate a portion of those projected reductions to an offset pool for anticipated new source growth. The State could then rely upon such emissions reductions to meet the nonattainment NSR offset requirements for permitting major sources. If necessary, the State may also include in its offset pool emissions reductions from a local control strategy.

Under this approach, as part of its State Implementation Plan submittal, a State would commit to ensuring that the emissions reductions counted in the offset pool actually occur. On a periodic basis (e.g., every year or every other year) the State must demonstrate that the permitted

amount of emissions increases from major new source growth is matched by a sufficient amount of creditable, enforceable, and contemporaneous emissions reductions from the offset pool, and that the reductions have accrued during or prior to the year (or other required period) of the major new source growth. In addition, a State must show that sufficient reductions have occurred within the same nonattainment area as the new source growth or from other nonattainment areas that have an equal or higher nonattainment classification and contribute to the nonattainment problem in the area where the proposed source will locate.

States will need to implement tracking systems to monitor the pool of offsets in order to demonstrate that the emissions reductions that were used to offset new source growth during the prescribed period of time meet the criteria listed above. We will work with our stakeholders, especially States, to develop these tracking systems, including remedies for any shortfalls that are identified through the tracking systems.

While most transitional areas will not need to develop attainment demonstrations, for those transitional areas that do need a demonstration, emissions reductions used to offset new source growth can be drawn from the State's attainment demonstration so long as the demonstration accounts for major source growth. States should take care not to draw offsets from any emissions reduction specifically mandated by the Act or used to satisfy an Act-mandated program, e.g., Reasonably Available Control Technology (RACT). In light of the abundant NOx reductions that will result from the regional NOx strategy, there should be ample excess reductions to provide the offsets necessary to accommodate anticipated major new source growth. Reductions resulting from a declining cap-and-trade program or an emissions budget program may be used as offsets, provided such programs generate actual emissions reductions beyond RACT and are consistent with any required reductions for RFP and attainment.

In addition to intrastate offset pools, we intend to allow interstate offset trading programs. Participating States would need to have a protocol in place to track and monitor the use of interstate offsets so that any particular reduction is credited or allocated only once. An emissions reduction occurring in one State could not be used in that State to offset new source growth and

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then used again in another State to offset new source growth there as well.

The pool of offsets approach described above could also be used in existing 1-hour ozone nonattainment areas, or in nonattainment areas for other pollutants, which are adversely affected by regional transport (either intrastate or interstate). Thus, in situations where a standard has yet to be attained, States may rely on emissions reductions achieved through a regional or local emission reduction program where transported emissions are contributing to their existing nonattainment problems. Sources would still be subject to the appropriate part D requirements, however, including the specified major source thresholds and offset ratios. Similarly, areas within the Northeast Ozone Transport Region would be allowed to use a pool of offsets as described above, although these areas may need to continue meeting the requirements applicable to the Ozone Transport Region (OTR) under section 184 of the Act. We will be addressing the issue of NSR requirements in the OTR under the new ozone NAAQS in a separate document.

Control Technology Requirements

Another key provision of the part D nonattainment NSR program is that, in order to be permitted, major new and modified sources must minimize their emission rate by complying with specific requirements for the installation and use of control technology. Sources locating in nonattainment areas must apply control technology to achieve LAER, which is generally the most stringent emission limit contained in a SIP or achieved in practice. Sources locating in attainment or unclassifiable areas must apply best available control technology (BACT) under the part C PSD program. Determinations of LAER and BACT technology are made on a case-by-case basis when the State or EPA acts on an individual source's permit application.

A BACT analysis typically is done on a case-by-case basis and requires consideration of energy, environmental, and economic impacts in determining the maximum degree of reduction achievable for the proposed new source or modification. In a BACT analysis, the most stringent emission limit, including the limit representing LAER and its associated control technology, must be considered. If the most stringent limit is rejected as BACT for a particular case, that decision

must be supported by an analysis that shows that the most stringent limit should not be chosen in light of the costs of (or other considerations involved in) achieving it. For example, if the most effective control technology would impose unacceptably high costs because of site-specific factors, that technology could be rejected as BACT for the proposed source. In this way, BACT may be less stringent than LAER.

Historically, BACT analyses have focused on site-specific and other local environmental impacts associated with the various control options and pollutants under review; regional environmental impacts from long-range transport of pollutants generally have not been considered. To recognize the regional nature of the ozone problem, we intend to require in a forthcoming rulemaking that regional environmental impacts from pollutants such as ozone be considered in BACT determinations. This requirement would apply for all PSD analyses, and it would ensure that BACT analyses consider all appropriate criteria in the selection of the required level of control. In attainment and unclassifiable areas where emissions of a particular pollutant do not contribute to an inter- or intrastate transport problem, the selection of BACT would not involve the considerations of the regional impacts analysis. Our intention to revise the PSD requirements for BACT to recognize the regional nature of certain air pollution problems (e.g., ozone formation) is a separate matter not associated with issues specifically related to transitional areas and the new ozone standard.

We believe that the consideration of adverse regional environmental impacts will result in BACT determinations in transitional areas that will require the use of the most effective technologies available, if not the most stringent limits. Including the benefits of reduced pollutant transport in the BACT analysis will likely result in requiring more effective technology than would occur absent the consideration of these benefits.

Because of circumstances unique to transitional areas, we think it is reasonable to conclude that for any specific new source any difference between "enhanced BACT", described above, and LAER under the current approach would be *de minimis*. As mentioned above, the application of enhanced BACT in transitional areas will result, in many cases, in emission limits

that are closely similar, if not identical, to what otherwise would be required by a LAER determination under the Agency's current approach. Furthermore, we believe that the number of major new or modified sources in transitional areas that would be subject to NSR is likely to be very small. Thus, any differences between enhanced BACT and LAER in transitional areas will not have a significant adverse effect on those areas' achievement of the ambient air quality standard. The requirement to offset emissions remaining after the application of controls will ensure that no additional ambient impact will result from a new major source or major modification regardless of any difference between LAER under the current approach and enhanced BACT.

We are considering including a provision in our rulemaking to require States that implement transitional NSR to impose an additional offset equal to any difference between BACT and LAER under the current approach. This additional offset could be derived from the pool of offsets established by the State.

Major Source Applicability Threshold

Under the general part D NSR requirements, the applicability threshold for "major stationary source" is defined as 100 tons per year of a nonattainment pollutant. In contrast, the major source threshold under the PSD program is either 100 or 250 tons per year, depending upon the type of stationary source undergoing review. To be consistent with the relevant part D NSR requirements, new or modified sources of ozone precursors in transitional areas would be subject to a major source threshold of 100 tons per year.

Ozone Precursors

Currently, only VOCs are expressly regulated as ozone precursors under the current PSD regulations. We intend to clarify our PSD and NSR regulations to ensure that NOx is included as an ozone precursor in all PSD and NSR programs. Where appropriate, for both PSD areas and transitional NSR areas, States would be required to modify their existing programs to include

NOx as an ozone precursor. In addition, as part of the offset pool approach, we believe at a minimum it is generally appropriate to allow trading of NOx reductions for VOC increases in transitional areas and nontransitional areas not subject to subpart 2. States may prohibit such trades in circumstances where it may not be appropriate to allow them. We will work closely with States to form the policy on this matter.

It is important to note that only major new and modified sources of ozone precursors will be subject to the NSR program for transitional areas. Consistent with established NSR and PSD applicability rules, major sources of other pollutants which emit significant, but not major, amounts of an ozone precursor will not be required to undergo part D NSR for ozone transitional areas because part D NSR applies only to major sources of ozone precursors. They also will not be required to undergo PSD review for the ozone precursors because nonattainment pollutants are not subject to PSD. Nevertheless, a major source with significant emissions of NOx will continue to be subject to PSD review with respect to the NO₂ NAAQS and increments.

Additional NSR Requirements

In addition to the emissions offset and control technology requirements discussed above, and consistent with current NSR requirements under section 173, sources locating in transitional areas will be required to (1) certify statewide compliance, and (2) perform a benefits analysis that considers alternative siting and operating options. We believe these requirements will not impose a substantial burden on permit applicants or permitting authorities. The certification of statewide compliance is a written statement by the applicant that all other major stationary sources that he or she owns or operates in the affected State are in compliance, or on a schedule for compliance, with their applicable emissions limitations and other standards under the Act. The benefits analysis considers alternative sites, sizes, production processes, and environmental control techniques for the prospective source to show that the benefits of the proposed construction will outweigh the environmental and social costs.